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RELEASES OF EXOTIC PARASITIDS AND PREDATORS
OF THE
RUSSIAN WHEAT APHID, *DIURAPHIS NOXIA* (KURDJUMOV),
IN THE
TEXAS PANHANDLE, 1987-1993

Texas Agricultural Experiment Station
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Releases of Exotic Parasitoids and Predators of the Russian Wheat Aphid, *Diuraphis noxia* (Kurdjumov), in the Texas Panhandle, 1987-1993

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Abstract

This bulletin presents a catalog of beneficial insects released for the biological control of Russian wheat aphids in the Texas Panhandle. Between 1983 and 1987, this project released nearly 1 million individuals. Fourteen parasitic Hymenoptera species, seven predaceous coccinellid beetle species, and three predaceous dipteran species are represented in this catalog. Although two of the parasitoid species have currently been recovered and are thought to be established, most of the species have not been recovered. In the future, others may be recovered, and the compilation in this bulletin provides researchers with species names, numbers of individuals released, release dates, locations, and year and shipment identifications associated with this project.

Introduction

Russian wheat aphid, *Diuraphis noxia* (Kurdjumov) (Homoptera: Aphididae), is a pest of wheat in many parts of the world (Hughes 1988). It invaded Texas and other western states in 1986 (Stoetzel 1987). After this invasion, a nationwide program was initiated to import, release, and colonize parasitoids and predators of the Russian wheat aphid from Africa, Asia, Europe, the Middle East, and South America. This program addressed biological control of this devastating pest and was a joint effort involving the United States Department of Agriculture Animal and Plant Health Inspection Service (USDA/APHIS), USDA Agricultural Research Service (USDA/ARS), and state agricultural experiment stations (SAES), including the Texas Agricultural Experiment Station (TAES).

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Key words: Russian wheat aphid, biological control.

The TAES Research and Extension Center at Amarillo-Bushland was involved with this program since its inception in late 1986 and as of late 1993, released nearly 1 million organisms in the Texas High Plains for colonization and biological control of Russian wheat aphids.

Although the program showed some early success in the Texas High Plains after the establishment of the parasitoids *Aphelinus asychis* Walker (Michels and Whitaker-Deerberg 1993) and *Aphelinus albipodus* (Hayat and Fatima, unpublished data), most species that were released have not been recovered. If other species are eventually recovered, the species' origins, release locations, and dates of releases will interest future researchers. This bulletin catalogs the exotic natural enemy species released in the Texas High Plains from 1987 to 1993. Information is provided on the origin of each shipment received at the TAES Amarillo-Bushland facility, the shipping laboratory and identification codes associated with the shipment, the release dates, the numbers of individuals released, and the release locations.

Materials and Methods

Organisms to be released for control of the Russian wheat aphid were collected by various researchers and were shipped to the United States. Shipments were sent to either the Texas A&M University Biological Control Laboratory at College Station, Texas, or the USDA/ARS Biological Insect Research Laboratory at Newark, Delaware. Some species were shipped directly to these two laboratories, while others were first routed through the USDA/ARS European Parasite Laboratory (EPL) at Behoult, France. The Texas facility primarily received parasitoid shipments although a few predator species were also received. The Newark facility received primarily predators and a few parasitoid species.

After the organisms were reared through one or more generations in quarantine to remove unwanted parasitoids and hyperparasitoids, founder colonies

were shipped to one of three laboratories to be cultured and increased. These laboratories were USDA/APHIS laboratories in Mission, Texas (parasitoids only) or Niles, Michigan (primarily predators with some parasitoids) and the University of California Biocontrol Laboratory at Riverside, California (parasitoids only).

After sufficient numbers of parasitoids or predators were reared, they were shipped to USDA personnel and other interested cooperators. Direct shipments to Texas release sites were also made from the Texas A&M University Biocontrol Laboratory Laboratory (parasitoids and predaceous dipterans).

Shipments to the TAES facility at Amarillo-Bushland were made from the originating laboratory by overnight courier service. If a shipment arrived in time, the organisms were taken to the release site within a few hours and released following standard procedures established by USDA/APHIS. If a shipment arrived late or if weather or other time constraints prohibited an immediate release, the organisms were kept in refrigerators until the earliest possible release opportunity.

Results and Discussion

Table 1 provides a record of the release efforts. The data is grouped first by the class of beneficial insect: parasitic Hymenoptera, predaceous coccinellid beetles, and predaceous diptera. Subsequent groupings are by species, release date, and identification number. Records for some early releases were insufficient or were not provided by the shipper. This type of missing information is indicated by an asterisk in Table 1.

The shipping laboratories are identified as Mission (USDA/APHIS at Mission, Texas), Niles (USDA/APHIS at Niles, Michigan), Riverside (University of California at Riverside, California), and TAMU (Texas A&M University at College Station, Texas) in Table 1. The release sites are identified as follows (all Texas locations): Black (5.5 miles south of Black), Bushland (TAES Research and Extension Center at Bushland), Etter (TAES North Plains Research Field at Etter), Hereford (10 miles north of Hereford), IBP (15 miles northeast of Amarillo), and Umbarger (5 miles southeast of Umbarger).

Identification numbers were assigned to groups of organisms as a method of tracking their origin and the time they had been in culture. These numbers are also associated with voucher specimens that are curated and housed in the Texas A&M University Department of Entomology museum in College Station. Identification numbers beginning with BIRL (USDA/

ARS laboratory at Newark), T (Texas A&M), or M (Mission) are followed by a two-digit code for the year and then a three-digit code for the sequential shipment number within a year, e.g., T91017 is the seventeenth importation received by the Texas A&M University Quarantine Laboratory in 1991. EPL numbers consist of a two-digit year code followed by a hyphen and then a two- or three-digit number designating the shipment number. Two other identification codes are specific for shipments from South America; BCWLSA is the code followed by a two-digit year and two-digit shipment number for shipments of coccinellid predators from Argentina, and PSRF is the code followed by a two-digit year and three-digit shipment number for coccinellid predators from Chile.

EPL and BIRL numbers denote sequential shipments leaving their quarantine laboratories. The same culture at these laboratories may have had several different shipment numbers. On the other hand, at the Texas A&M University laboratory, sequential numbers were assigned to each importation received. Although they carried culture (T) numbers, no specific identification numbers were assigned to outgoing shipments. Therefore, all releases from the same culture carried the same T number.

Acknowledgments

The authors thank C. M. Rush and C. D. Patrick, Texas Agricultural Experiment Station and Texas Agricultural Extension Service, respectively, for their review of the manuscript. Thanks are also due to L. E. Wendel of the USDA/APHIS Biological Control Laboratory in Mission, Texas; R. V. Flanders, T. L. Burger, Juli Gould, and D. Prokrym of the USDA/APHIS laboratory in Niles, Michigan; and D. Gonzales of the University of California at Riverside for their cooperation in shipping materials to the Texas High Plains.

Literature Cited

- Hughes, R. D. 1988. A synopsis of information on the Russian wheat aphid, *Diuraphis noxia* (Mordvilko). CSIRO Division of Entomology Technical Paper No. 28. 39 pp.
- Michels, G. J., and R. L. Whitaker-Deerberg. 1993. Recovery of *Aphelinus asychis*, an imported parasitoid of the Russian wheat aphid, in the Texas Panhandle. Southwest. Entomol. 18:11-17.
- Stoetzel, M. B. 1987. Information on and identification of *Diuraphis noxia* (Homoptera: Aphididae) and other aphid species colonizing leaves of wheat and barley in the United States. J. Econ. Entomol. 80:696-704.

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
Parasitic Hymenoptera								
12/12/90	T89115	<i>Aphelinus abdominalis</i>	France	A	TAMU	80	Randall	Bushland
Total		<i>Aphelinus abdominalis</i>				80		
06/22/89	T88020	<i>Aphelinus albipodus</i>	Turkey	A	TAMU	35	Randall	Bushland
07/13/89	T89018	<i>Aphelinus albipodus</i>	Iraq	A	TAMU	60	*	*
08/16/89	T89018	<i>Aphelinus albipodus</i>	Iran	A	TAMU	35	*	*
08/16/89	T89074	<i>Aphelinus albipodus</i>	Caucasus	A	TAMU	74	*	*
04/10/90	T88020	<i>Aphelinus albipodus</i>	Turkey	M	Mission	500	DeafSmith	Hereford
04/10/90	T89074	<i>Aphelinus albipodus</i>	Caucasus	M	Mission	500	DeafSmith	Hereford
04/11/90	T88020	<i>Aphelinus albipodus</i>	Turkey	A	TAMU	30	*	*
04/11/90	T89018	<i>Aphelinus albipodus</i>	Iran	A	TAMU	10	*	*
04/18/90	T88020	<i>Aphelinus albipodus</i>	Turkey	*	*	600	Carson	IBP
04/18/90	T89074	<i>Aphelinus albipodus</i>	Caucasus	M	Mission	500	Carson	IBP
04/19/90	T88020	<i>Aphelinus albipodus</i>	Turkey	A	Mission	500	DeafSmith	Hereford
04/19/90	T89074	<i>Aphelinus albipodus</i>	Caucasus	A	Mission	500	DeafSmith	Hereford
04/24/90	T88020	<i>Aphelinus albipodus</i>	Turkey	M	Mission	500	Carson	IBP
04/24/90	T89074	<i>Aphelinus albipodus</i>	Caucasus	M	Mission	500	Carson	IBP
05/01/90	T88020	<i>Aphelinus albipodus</i>	Turkey	M	Mission	700	Carson	IBP
05/01/90	T89074	<i>Aphelinus albipodus</i>	Caucasus	M	Mission	750	Carson	IBP
06/07/90	T88020	<i>Aphelinus albipodus</i>	Turkey	M	Mission	500	Potter	Bushland
06/07/90	T89074	<i>Aphelinus albipodus</i>	Caucasus	M	Mission	500	Potter	Bushland
12/12/90	T90025	<i>Aphelinus albipodus</i>	Pakistan	A	TAMU	85	Randall	Bushland
04/17/91	T89075	<i>Aphelinus albipodus</i>	Yugoslavia	A	TAMU	100	Randall	Bushland
07/03/91	T91049	<i>Aphelinus albipodus</i>	Iran	A	TAMU	100	Randall	Bushland
08/09/91	T89018	<i>Aphelinus albipodus</i>	Iran	A	TAMU	40	Randall	Bushland
08/09/91	T89075	<i>Aphelinus albipodus</i>	Yugoslavia	A	TAMU	50	Randall	Bushland
08/09/91	T90076	<i>Aphelinus albipodus</i>	Kirghizia	M	Riverside	1,000	Randall	Bushland
08/16/91	T90076	<i>Aphelinus albipodus</i>	Kirghizia	M	Riverside	5,260	Randall	Bushland
08/16/91	T90085	<i>Aphelinus albipodus</i>	Caucasus	M	Mission	2,500	Randall	Bushland
08/22/91	T90033	<i>Aphelinus albipodus</i>	Pakistan	M	Mission	250	Randall	Bushland
08/22/91	T90076	<i>Aphelinus albipodus</i>	Kirghizia	M	Riverside	7,900	DeafSmith	Black
08/22/91	T90076	<i>Aphelinus albipodus</i>	Kirghizia	A	Riverside	270	DeafSmith	Black
08/22/91	T90076	<i>Aphelinus albipodus</i>	Kirghizia	M	Mission	500	Randall	Bushland

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
08/22/91	T90085	<i>Aphelinus albipodus</i>	Caucasus	M	Mission	1,250	Randall	Bushland
08/29/91	T90033	<i>Aphelinus albipodus</i>	Pakistan	M	Mission	500	Randall	Bushland
08/29/91	T90076	<i>Aphelinus albipodus</i>	Kirghizia	M	Riverside	400	Randall	Bushland
08/29/91	T90076	<i>Aphelinus albipodus</i>	Kirghizia	M	Mission	1,000	Randall	Bushland
08/29/91	T90085	<i>Aphelinus albipodus</i>	Cuacanus	M	Mission	1,000	Randall	Bushland
02/20/92	T91057	<i>Aphelinus albipodus</i>	Kazakhstan	A	TAMU	350	Randall	Bushland
02/20/92	T91080B	<i>Aphelinus albipodus</i>	Kazakhstan	A	TAMU	350	Randall	Bushland
02/20/92	T90085	<i>Aphelinus albipodus</i>	Caucasus	A	TAMU	400	Randall	Bushland
03/05/92	T89018	<i>Aphelinus albipodus</i>	Iran	A	TAMU	60	Randall	Bushland
03/19/92	T90085	<i>Aphelinus albipodus</i>	Caucasus	A	TAMU	250	Randall	Bushland
03/19/92	T91067A	<i>Aphelinus albipodus</i>	Iran	A	TAMU	200	Randall	Bushland
03/19/92	T91102	<i>Aphelinus albipodus</i>	China	A	TAMU	115	Randall	Bushland
03/19/92	T91107	<i>Aphelinus albipodus</i>	China	A	TAMU	100	Randall	Bushland
03/19/92	T91110	<i>Aphelinus albipodus</i>	Kazakhstan	A	TAMU	115	Randall	Bushland
03/19/92	T90056	<i>Aphelinus albipodus</i>	Pakistan	A	TAMU	50	Randall	Bushland
03/27/92	T90085	<i>Aphelinus albipodus</i>	Caucasus	A	TAMU	300	Moore	Etter
03/27/92	T91067A	<i>Aphelinus albipodus</i>	Iran	A	TAMU	80	Moore	Etter
03/27/92	T91102	<i>Aphelinus albipodus</i>	China	A	TAMU	250	Moore	Etter
03/27/92	T91110	<i>Aphelinus albipodus</i>	Kazakhstan	A	TAMU	200	Moore	Etter
04/10/92	T91043	<i>Aphelinus albipodus</i>	Pakistan	A	TAMU	100	Randall	Bushland
04/10/92	T91093	<i>Aphelinus albipodus</i>	China	A	TAMU	25	Randall	Bushland
04/10/92	T91049	<i>Aphelinus albipodus</i>	Iran	A	TAMU	180	Randall	Bushland
04/17/92	T91043	<i>Aphelinus albipodus</i>	Pakistan	A	TAMU	400	Randall	Bushland
04/24/92	T91057	<i>Aphelinus albipodus</i>	Kazakhstan	A	TAMU	85	Randall	Bushland
04/24/92	T91063	<i>Aphelinus albipodus</i>	Iran	A	TAMU	200	Randall	Bushland
04/24/92	T91067A	<i>Aphelinus albipodus</i>	Iran	A	TAMU	200	Randall	Bushland
05/08/92	T91043	<i>Aphelinus albipodus</i>	Pakistan	A	TAMU	800	Randall	Bushland
05/08/92	T91057	<i>Aphelinus albipodus</i>	Kazakhstan	A	TAMU	15	Randall	Bushland
05/08/92	T91067A	<i>Aphelinus albipodus</i>	Iran	A	TAMU	100	Randall	Bushland
05/08/92	T91093	<i>Aphelinus albipodus</i>	China	A	TAMU	100	Randall	Bushland
05/20/92	T91043	<i>Aphelinus albipodus</i>	Pakistan	A	TAMU	150	Randall	Bushland
05/20/92	T91093	<i>Aphelinus albipodus</i>	China	A	TAMU	100	Randall	Bushland
07/08/92	T90076	<i>Aphelinus albipodus</i>	Kirghizia	M	Niles	3,000	Moore	Etter

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
07/08/92	T91043	<i>Aphelinus albipodus</i>	Pakistan	M	Mission	375	Moore	Etter
07/08/92	T91057	<i>Aphelinus albipodus</i>	Kazakhstan	M	Riverside	1,000	Moore	Etter
07/08/92	T91063	<i>Aphelinus albipodus</i>	Iran	M	Mission	500	Moore	Etter
07/08/92	T91102	<i>Aphelinus albipodus</i>	China	M	Riverside	800	Moore	Etter
07/08/92	T91110	<i>Aphelinus albipodus</i>	Kazakhstan	M	Mission	400	Moore	Etter
07/15/92	T90076	<i>Aphelinus albipodus</i>	Kirghizia	M	Niles	5,000	Moore	Etter
07/15/92	T90076	<i>Aphelinus albipodus</i>	Kirghizia	A	Niles	1,000	Moore	Etter
07/15/92	T91043	<i>Aphelinus albipodus</i>	Pakistan	M	Mission	500	Moore	Etter
07/15/92	T91057	<i>Aphelinus albipodus</i>	Kazakhstan	M	Riverside	400	Moore	Etter
07/15/92	T91063	<i>Aphelinus albipodus</i>	Iran	M	Mission	1,000	Moore	Etter
07/15/92	T91093	<i>Aphelinus albipodus</i>	China	M	Riverside	1,000	Moore	Etter
07/15/92	T91102	<i>Aphelinus albipodus</i>	China	M	Riverside	1,500	Moore	Etter
07/15/92	T91110	<i>Aphelinus albipodus</i>	Kazakhstan	M	Mission	600	Moore	Etter
07/22/92	T90076	<i>Aphelinus albipodus</i>	Kirghizia	A	Niles	600	Moore	Etter
07/22/92	T90076	<i>Aphelinus albipodus</i>	Kirghizia	M	Niles	15,000	Moore	Etter
07/22/92	T91043	<i>Aphelinus albipodus</i>	Pakistan	M	Mission	400	Moore	Etter
07/22/92	T91057	<i>Aphelinus albipodus</i>	Kazakhstan	M	Riverside	500	Moore	Etter
07/22/92	T91063	<i>Aphelinus albipodus</i>	Iran	M	Mission	500	Moore	Etter
07/22/92	T91093	<i>Aphelinus albipodus</i>	China	M	Riverside	550	Moore	Etter
07/22/92	T91100	<i>Aphelinus albipodus</i>	Uzbekistan	A	TAMU	25	Moore	Etter
07/22/92	T91102	<i>Aphelinus albipodus</i>	China	M	Riverside	2,450	Moore	Etter
07/22/92	T91110	<i>Aphelinus albipodus</i>	Kazakhstan	M	Mission	600	Moore	Etter
07/29/92	T90076	<i>Aphelinus albipodus</i>	Kirghizia	M	Niles	8,500	Moore	Etter
07/29/92	T90076	<i>Aphelinus albipodus</i>	Kirghizia	A	Niles	2,250	Moore	Etter
07/29/92	T91043	<i>Aphelinus albipodus</i>	Pakistan	M	Mission	800	Moore	Etter
07/29/92	T91057	<i>Aphelinus albipodus</i>	Kazakhstan	M	Riverside	1,000	Moore	Etter
07/29/92	T91063	<i>Aphelinus albipodus</i>	Iran	M	Mission	500	Moore	Etter
07/29/92	T91093	<i>Aphelinus albipodus</i>	China	M	Riverside	500	Moore	Etter
07/29/92	T91102	<i>Aphelinus albipodus</i>	China	M	Riverside	1,000	Moore	Etter
07/29/92	T91110	<i>Aphelinus albipodus</i>	Kazakhstan	M	Mission	500	Moore	Etter
08/05/92	T90076	<i>Aphelinus albipodus</i>	Kirghizia	M	Niles	8,000	Moore	Etter
08/05/92	T91043	<i>Aphelinus albipodus</i>	Pakistan	M	Mission	675	Moore	Etter
08/05/92	T91057	<i>Aphelinus albipodus</i>	Kazakhstan	M	Riverside	1,000	Moore	Etter

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
08/05/92	T91063	<i>Aphelinus albipodus</i>	Iran	M	Mission	550	Moore	Etter
08/05/92	T91093	<i>Aphelinus albipodus</i>	China	M	Riverside	1,000	Moore	Etter
08/05/92	T91110	<i>Aphelinus albipodus</i>	Kazakhstan	M	Mission	500	Moore	Etter
08/12/92	T90076	<i>Aphelinus albipodus</i>	Kirghizia	A	Niles	4,500	Moore	Etter
08/12/92	T90076	<i>Aphelinus albipodus</i>	Kirghizia	M	Niles	6,500	Moore	Etter
08/12/92	T91043	<i>Aphelinus albipodus</i>	Pakistan	A	TAMU	100	Moore	Etter
08/12/92	T91043	<i>Aphelinus albipodus</i>	Pakistan	M	Mission	900	Moore	Etter
08/12/92	T91057	<i>Aphelinus albipodus</i>	Kazakhstan	M	Riverside	250	Moore	Etter
08/12/92	T91063	<i>Aphelinus albipodus</i>	Iran	M	Mission	650	Moore	Etter
08/12/92	T91067	<i>Aphelinus albipodus</i>	Iran	A	TAMU	100	Moore	Etter
08/12/92	T91093	<i>Aphelinus albipodus</i>	China	M	Riverside	250	Moore	Etter
08/12/92	T91110	<i>Aphelinus albipodus</i>	Kazakhstan	M	Mission	900	Moore	Etter
08/12/92	T92023	<i>Aphelinus albipodus</i>	China	A	TAMU	25	Moore	Etter
08/19/92	T90076	<i>Aphelinus albipodus</i>	Kirghizia	M	Niles	6,250	Moore	Etter
08/19/92	T91043	<i>Aphelinus albipodus</i>	Pakistan	M	Mission	1,350	Moore	Etter
08/19/92	T91057	<i>Aphelinus albipodus</i>	Kazakhstan	M	Riverside	1,000	Moore	Etter
08/19/92	T91063	<i>Aphelinus albipodus</i>	Iran	M	Mission	900	Moore	Etter
08/19/92	T91093	<i>Aphelinus albipodus</i>	China	M	Riverside	1,000	Moore	Etter
08/19/92	T91102	<i>Aphelinus albipodus</i>	China	M	Riverside	500	Moore	Etter
08/19/92	T91110	<i>Aphelinus albipodus</i>	Kazakhstan	M	Mission	500	Moore	Etter
08/19/92	T88020	<i>Aphelinus albipodus</i>	Turkey	A	TAMU	100	Moore	Etter
08/19/92	T90018	<i>Aphelinus albipodus</i>	Iraq	A	TAMU	100	Moore	Etter
08/19/92	T91067	<i>Aphelinus albipodus</i>	Iran	A	TAMU	100	Moore	Etter
08/19/92	T91093	<i>Aphelinus albipodus</i>	China	A	TAMU	70	Moore	Etter
08/19/92	T92023	<i>Aphelinus albipodus</i>	China	A	TAMU	100	Moore	Etter
08/26/92	T90076	<i>Aphelinus albipodus</i>	Kirghizia	M	Niles	4,250	Moore	Etter
08/26/92	T90076	<i>Aphelinus albipodus</i>	Kirghizia	A	Niles	1,050	Moore	Etter
08/26/92	T91043	<i>Aphelinus albipodus</i>	Pakistan	M	Mission	1,500	Moore	Etter
08/26/92	T91057	<i>Aphelinus albipodus</i>	Kazakhstan	M	Riverside	500	Moore	Etter
08/26/92	T91063	<i>Aphelinus albipodus</i>	Iran	M	Mission	500	Moore	Etter
08/26/92	T91093	<i>Aphelinus albipodus</i>	China	M	Riverside	1,100	Moore	Etter
08/26/92	T91102	<i>Aphelinus albipodus</i>	China	M	Riverside	400	Moore	Etter
08/26/92	T91110	<i>Aphelinus albipodus</i>	Kazakhstan	M	Mission	600	Moore	Etter

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
09/02/92	T90076	<i>Aphelinus albipodus</i>	Kirghizia	M	Niles	18,000	Moore	Etter
09/02/92	T91043	<i>Aphelinus albipodus</i>	Pakistan	A	TAMU	150	Moore	Etter
09/02/92	T91043	<i>Aphelinus albipodus</i>	Pakistan	M	Mission	1,800	Moore	Etter
09/02/92	T91057	<i>Aphelinus albipodus</i>	Kazakhstan	M	Riverside	1,000	Moore	Etter
09/02/92	T91063	<i>Aphelinus albipodus</i>	Iran	M	Mission	600	Moore	Etter
09/02/92	T91067A	<i>Aphelinus albipodus</i>	Iran	A	TAMU	100	Moore	Etter
09/02/92	T91067A	<i>Aphelinus albipodus</i>	Iran	A	TAMU	125	Moore	Etter
09/02/92	T91093	<i>Aphelinus albipodus</i>	China	M	Riverside	500	Moore	Etter
09/02/92	T91102	<i>Aphelinus albipodus</i>	China	M	Riverside	200	Moore	Etter
09/02/92	T91110	<i>Aphelinus albipodus</i>	Kazakhstan	M	Mission	500	Moore	Etter
09/02/92	T92023	<i>Aphelinus albipodus</i>	China	A	TAMU	200	Moore	Etter
09/02/92	T92023	<i>Aphelinus albipodus</i>	China	A	TAMU	150	Moore	Etter
09/18/92	T90076	<i>Aphelinus albipodus</i>	Kirghizia	M	Niles	4,500	Moore	Etter
09/18/92	T90076	<i>Aphelinus albipodus</i>	Kirghizia	A	Niles	11,850	Moore	Etter
10/14/92	T91067A	<i>Aphelinus albipodus</i>	Iran	A	TAMU	400	Moore	Etter
10/14/92	T92023	<i>Aphelinus albipodus</i>	China	A	TAMU	150	Moore	Etter
10/21/92	T91067A	<i>Aphelinus albipodus</i>	Iran	A	TAMU	100	Moore	Etter
10/21/92	T92023	<i>Aphelinus albipodus</i>	China	A	TAMU	55	Moore	Etter
11/05/92	T90076	<i>Aphelinus albipodus</i>	Kirghizia	M	Niles	3,000	Moore	Etter
11/05/92	T90076	<i>Aphelinus albipodus</i>	Kirghizia	A	Niles	525	Moore	Etter
03/25/93	T91100	<i>Aphelinus albipodus</i>	Uzbekistan	A	TAMU	180	Randall	Umbarger
03/25/93	T92023	<i>Aphelinus albipodus</i>	China	A	TAMU	400	Randall	Umbarger
05/04/93	T89018	<i>Aphelinus albipodus</i>	Iraq	A	TAMU	90	Randall	*
05/04/93	T92023	<i>Aphelinus albipodus</i>	China	A	TAMU	200	Randall	*
08/17/93	*	<i>Aphelinus albipodus</i>	China	M	Niles	8,000	Randall	Bushland
08/17/93	*	<i>Aphelinus albipodus</i>	Kazakhstan	M	Niles	6,000	Randall	Bushland
08/17/93	*	<i>Aphelinus albipodus</i>	Kazakhstan	M	Niles	8,000	Randall	Bushland
08/17/93	*	<i>Aphelinus albipodus</i>	Pakistan	M	Niles	8,750	Randall	Bushland
08/17/93	T92023	<i>Aphelinus albipodus</i>	China	M	Riverside	2,500	Randall	Bushland
08/24/93	T91110	<i>Aphelinus albipodus</i>	Kazakhstan	M	Niles	10,250	Randall	Bushland
08/24/93	T92023	<i>Aphelinus albipodus</i>	China	M	Riverside	3,500	Randall	Bushland
08/24/93	T91057	<i>Aphelinus albipodus</i>	Kazakhstan	M	Niles	7,000	Randall	Bushland
08/24/93	T91093	<i>Aphelinus albipodus</i>	China	M	Niles	5,000	Randall	Bushland

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
08/31/93	T91057	<i>Aphelinus albipodus</i>	Kazakhstan	M	Niles	8,000	Randall	Bushland
08/31/93	*	<i>Aphelinus albipodus</i>	Pakistan	M	Niles	5,500	Randall	Bushland
08/31/93	T91093	<i>Aphelinus albipodus</i>	China	M	Niles	3,000	Randall	Bushland
08/31/93	T91110	<i>Aphelinus albipodus</i>	Kazakhstan	M	Niles	7,000	Randall	Bushland
08/31/93	T92023	<i>Aphelinus albipodus</i>	China	M	Riverside	2,500	Randall	Bushland
Total		<i>Aphelinus albipodus</i>				264,569		
04/10/90	T89119	<i>Aphelinus asychis</i>	France	M	Mission	1,000	DeafSmith	Hereford
04/11/90	T89119	<i>Aphelinus asychis</i>	France	A	TAMU	35	*	*
04/18/90	T89119	<i>Aphelinus asychis</i>	France	M	Mission	1,000	Carson	IBP
04/19/90	T89119	<i>Aphelinus asychis</i>	France	A	Mission	1,000	DeafSmith	Hereford
04/24/90	T89119	<i>Aphelinus asychis</i>	France	M	Mission	1,500	Carson	IBP
04/25/90	T89119	<i>Aphelinus asychis</i>	France	A	TAMU	22	Carson	IBP
05/01/90	T89119	<i>Aphelinus asychis</i>	France	M	Mission	1,000	Carson	IBP
06/07/90	T89119	<i>Aphelinus asychis</i>	France	M	Mission	500	Potter	Bushland
12/12/90	T89119	<i>Aphelinus asychis</i>	France	A	TAMU	60	Randall	Bushland
03/21/91	T90116	<i>Aphelinus asychis</i>	Chile	A	TAMU	350	*	*
08/09/91	T91061	<i>Aphelinus asychis</i>	Kazakhstan	A	TAMU	150	Randall	Bushland
08/09/91	T91062	<i>Aphelinus asychis</i>	Pakistan	A	TAMU	25	Randall	Bushland
08/16/91	T90116	<i>Aphelinus asychis</i>	Chile	M	Riverside	5,200	Randall	Bushland
08/22/91	T90116	<i>Aphelinus asychis</i>	Chile	M	Riverside	800	DeafSmith	Black
08/22/91	T90116	<i>Aphelinus asychis</i>	Chile	M	Mission	5,250	Randall	Bushland
08/29/91	T90116	<i>Aphelinus asychis</i>	Chile	A	Riverside	900	Randall	Bushland
08/29/91	T90116	<i>Aphelinus asychis</i>	Chile	M	Mission	1,000	Randall	Bushland
09/06/91	T90116	<i>Aphelinus asychis</i>	Chile	M	Mission	2,000	Randall	Bushland
02/20/92	T91062	<i>Aphelinus asychis</i>	Iran	A	TAMU	200	Randall	Bushland
02/20/92	T90116	<i>Aphelinus asychis</i>	Chile	A	TAMU	80	Randall	Bushland
02/20/92	T91061	<i>Aphelinus asychis</i>	Kazakhstan	A	TAMU	1,200	Randall	Bushland
03/05/92	T90100	<i>Aphelinus asychis</i>	Brazil	A	TAMU	450	Randall	Bushland
03/05/92	T90116	<i>Aphelinus asychis</i>	Chile	A	TAMU	700	Randall	Bushland
03/05/92	T91061	<i>Aphelinus asychis</i>	Kazakhstan	A	TAMU	140	Randall	Bushland
03/05/92	T91062	<i>Aphelinus asychis</i>	Pakistan	A	TAMU	30	Randall	Bushland
03/19/92	T91061	<i>Aphelinus asychis</i>	Kazakhstan	A	TAMU	900	Randall	Bushland
03/19/92	T91062	<i>Aphelinus asychis</i>	Pakistan	A	TAMU	200	Randall	Bushland

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
03/27/92	T90116	<i>Aphelinus asychis</i>	Chile	A	TAMU	600	Moore	Etter
04/10/92	T90116	<i>Aphelinus asychis</i>	Chile	A	TAMU	400	Randall	Bushland
04/10/92	T91061	<i>Aphelinus asychis</i>	Kazakhstan	A	TAMU	600	Randall	Bushland
04/17/92	T90116	<i>Aphelinus asychis</i>	Chile	A	TAMU	400	Randall	Bushland
04/17/92	T91061	<i>Aphelinus asychis</i>	Kazakhstan	A	TAMU	400	Randall	Bushland
04/17/92	T91062	<i>Aphelinus asychis</i>	Pakistan	A	TAMU	400	Randall	Bushland
04/24/92	T90116	<i>Aphelinus asychis</i>	Chile	A	TAMU	400	Randall	Bushland
04/24/92	T91061	<i>Aphelinus asychis</i>	Kazakhstan	A	TAMU	450	Randall	Bushland
04/24/92	T91062	<i>Aphelinus asychis</i>	Pakistan	A	TAMU	200	Randall	Bushland
05/08/92	T90100	<i>Aphelinus asychis</i>	Brazil	A	TAMU	150	Randall	Bushland
05/08/92	T90116	<i>Aphelinus asychis</i>	Chile	A	TAMU	400	Randall	Bushland
05/08/92	T91061	<i>Aphelinus asychis</i>	Kazakhstan	A	TAMU	600	Randall	Bushland
05/08/92	T91062	<i>Aphelinus asychis</i>	Pakistan	A	TAMU	800	Randall	Bushland
05/20/92	T90100	<i>Aphelinus asychis</i>	Brazil	A	TAMU	200	Randall	Bushland
05/20/92	T90100	<i>Aphelinus asychis</i>	Brazil	A	TAMU	200	Randall	Bushland
05/20/92	T90100	<i>Aphelinus asychis</i>	Brazil	A	TAMU	200	Randall	Bushland
05/20/92	T90116	<i>Aphelinus asychis</i>	Chile	A	TAMU	200	Randall	Bushland
05/20/92	T90116	<i>Aphelinus asychis</i>	Chile	A	TAMU	200	Randall	Bushland
05/20/92	T90116	<i>Aphelinus asychis</i>	Chile	A	TAMU	200	Randall	Bushland
05/20/92	T91061	<i>Aphelinus asychis</i>	Kazakhstan	A	TAMU	200	Randall	Bushland
05/20/92	T91061	<i>Aphelinus asychis</i>	Kazakhstan	A	TAMU	200	Randall	Bushland
05/20/92	T91062	<i>Aphelinus asychis</i>	Pakistan	A	TAMU	150	Randall	Bushland
05/20/92	T91062	<i>Aphelinus asychis</i>	Pakistan	A	TAMU	200	Randall	Bushland
07/08/92	T90116	<i>Aphelinus asychis</i>	Chile	M	Niles	2,500	Moore	Etter
07/08/92	T90116	<i>Aphelinus asychis</i>	Chile	A	Niles	1,354	Moore	Etter
07/08/92	T91061	<i>Aphelinus asychis</i>	Kazakhstan	M	Riverside	825	Moore	Etter
07/08/92	T91062	<i>Aphelinus asychis</i>	Pakistan	M	Mission	625	Moore	Etter
07/15/92	T90116	<i>Aphelinus asychis</i>	Chile	M	Niles	5,500	Moore	Etter
07/15/92	T90116	<i>Aphelinus asychis</i>	Chile	A	Niles	2,000	Moore	Etter
07/15/92	T91062	<i>Aphelinus asychis</i>	Pakistan	M	Mission	875	Moore	Etter
07/22/92	T90116	<i>Aphelinus asychis</i>	Chile	A	TAMU	20	Moore	Etter
07/22/92	T90116	<i>Aphelinus asychis</i>	Chile	M	Niles	10,000	Moore	Etter

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
07/22/92	T91061	<i>Aphelinus asychis</i>	Kazakhstan	A	TAMU	80	Moore	Etter
07/22/92	T91062	<i>Aphelinus asychis</i>	Pakistan	M	Mission	400	Moore	Etter
07/29/92	T90116	<i>Aphelinus asychis</i>	Chile	M	Niles	6,000	Moore	Etter
07/29/92	T90116	<i>Aphelinus asychis</i>	Chile	A	Niles	2,250	Moore	Etter
07/29/92	T91061	<i>Aphelinus asychis</i>	Kazakhstan	M	Riverside	500	Moore	Etter
07/29/92	T91062	<i>Aphelinus asychis</i>	Pakistan	M	Mission	1,000	Moore	Etter
08/05/92	T90116	<i>Aphelinus asychis</i>	Chile	M	Niles	13,000	Moore	Etter
08/05/92	T90116	<i>Aphelinus asychis</i>	Chile	A	Niles	900	Moore	Etter
08/05/92	T91061	<i>Aphelinus asychis</i>	Kazakhstan	M	Riverside	1,500	Moore	Etter
08/05/92	T91062	<i>Aphelinus asychis</i>	Pakistan	M	Mission	500	Moore	Etter
08/12/92	T90116	<i>Aphelinus asychis</i>	Chile	A	TAMU	100	Moore	Etter
08/12/92	T90116	<i>Aphelinus asychis</i>	Chile	A	Niles	3,200	Moore	Etter
08/12/92	T90116	<i>Aphelinus asychis</i>	Chile	M	Niles	9,000	Moore	Etter
08/12/92	T91061	<i>Aphelinus asychis</i>	Kazakhstan	M	Riverside	500	Moore	Etter
08/12/92	T91061	<i>Aphelinus asychis</i>	Kazakhstan	A	TAMU	100	Moore	Etter
08/12/92	T91062	<i>Aphelinus asychis</i>	Pakistan	M	Mission	300	Moore	Etter
08/18/92	T91061	<i>Aphelinus asychis</i>	Kazakhstan	A	TAMU	800	Moore	Etter
08/19/92	T90116	<i>Aphelinus asychis</i>	Chile	A	Niles	3,000	Moore	Etter
08/19/92	T90116	<i>Aphelinus asychis</i>	Chile	M	Niles	9,000	Moore	Etter
08/19/92	T91061	<i>Aphelinus asychis</i>	Kazakhstan	M	Riverside	1,500	Moore	Etter
08/19/92	T91062	<i>Aphelinus asychis</i>	Pakistan	M	Mission	900	Moore	Etter
08/26/92	T90116	<i>Aphelinus asychis</i>	Chile	A	Niles	1,000	Moore	Etter
08/26/92	T90116	<i>Aphelinus asychis</i>	Chile	M	Niles	10,000	Moore	Etter
08/26/92	T91061	<i>Aphelinus asychis</i>	Kazakhstan	M	Riverside	1,000	Moore	Etter
08/26/92	T91062	<i>Aphelinus asychis</i>	Pakistan	M	Mission	500	Moore	Etter
09/02/92	T90116	<i>Aphelinus asychis</i>	Chile	A	TAMU	150	Moore	Etter
09/02/92	T90116	<i>Aphelinus asychis</i>	Chile	M	Niles	26,000	Moore	Etter
09/02/92	T90116	<i>Aphelinus asychis</i>	Chile	A	Niles	2,700	Moore	Etter
09/02/92	T91061	<i>Aphelinus asychis</i>	Kazakhstan	M	Riverside	850	Moore	Etter
09/02/92	T91061	<i>Aphelinus asychis</i>	Kazakhstan	A	TAMU	150	Moore	Etter
09/18/92	T90116	<i>Aphelinus asychis</i>	Chile	M	Niles	6,000	Moore	Etter
09/18/92	T90116	<i>Aphelinus asychis</i>	Chile	A	Niles	14,922	Moore	Etter
10/14/92	T91061	<i>Aphelinus asychis</i>	Kazakhstan	A	TAMU	1,000	Moore	Etter

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
10/21/92	T90116	<i>Aphelinus asychis</i>	Chile	A	TAMU	80	Moore	Etter
10/21/92	T91061	<i>Aphelinus asychis</i>	Kazakhstan	A	TAMU	200	Moore	Etter
10/21/92	T91061	<i>Aphelinus asychis</i>	Kazakhstan	A	TAMU	200	Moore	Etter
10/21/92	T91061	<i>Aphelinus asychis</i>	Kazakhstan	A	TAMU	200	Moore	Etter
11/04/92	T90116	<i>Aphelinus asychis</i>	Chile	A	Niles	22,900	Randall	Bushland
11/05/92	T90116	<i>Aphelinus asychis</i>	Chile	A	Niles	22,900	Moore	Etter
03/25/93	T92051	<i>Aphelinus asychis</i>	China	A	TAMU	800	Randall	Umbarger
04/14/93	T92051	<i>Aphelinus asychis</i>	China	A	TAMU	500	Randall	Umbarger
05/04/93	T92051	<i>Aphelinus asychis</i>	China	A	TAMU	700	Randall	Umbarger
06/02/93	T92051	<i>Aphelinus asychis</i>	China	A	TAMU	1,200	Randall	Bushland
08/17/93	M92001	<i>Aphelinus asychis</i>	China	M	Mission	900	Randall	Bushland
08/17/93	M92002	<i>Aphelinus asychis</i>	Morocco	M	Mission	900	Randall	Bushland
08/17/93	T91061	<i>Aphelinus asychis</i>	Kazakhstan	M	Riverside	2,000	Randall	Bushland
08/24/93	EPL92-83	<i>Aphelinus asychis</i>	*	M	Riverside	5,000	Randall	Bushland
08/24/93	M92001	<i>Aphelinus asychis</i>	China	M	Mission	500	Randall	Bushland
08/24/93	M92002	<i>Aphelinus asychis</i>	Morocco	M	Mission	500	Randall	Bushland
08/24/93	T91061	<i>Aphelinus asychis</i>	Kazakhstan	M	Riverside	3,000	Randall	Bushland
08/24/93	T91062	<i>Aphelinus asychis</i>	Pakistan	M	Niles	2,000	Randall	Bushland
08/31/93	M92001	<i>Aphelinus asychis</i>	China	M	Mission	500	Randall	Bushland
08/31/93	M92002	<i>Aphelinus asychis</i>	Morocco	M	Mission	500	Randall	Bushland
08/31/93	T91061	<i>Aphelinus asychis</i>	Kazakhstan	M	Riverside	1,500	Randall	Bushland
Total		<i>Aphelinus asychis</i>				242,923		
04/11/90	T89041	<i>Aphelinus sp nr varipes</i>	Greece	A	TAMU	15	*	*
04/25/90	T89041	<i>Aphelinus sp nr varipes</i>	Greece	A	TAMU	45	Carson	IBP
08/18/92	T89041	<i>Aphelinus sp nr varipes</i>	Greece	A	TAMU	50	Moore	Etter
09/02/92	T89041	<i>Aphelinus sp nr varipes</i>	Greece	A	TAMU	60	Moore	Etter
05/05/93	T89041	<i>Aphelinus sp nr varipes</i>	Greece	A	TAMU	50	Randall	Umbarger
05/05/93	T92052	<i>Aphelinus sp nr varipes</i>	China	A	TAMU	400	Randall	Umbarger
05/14/93	T89041	<i>Aphelinus sp nr varipes</i>	Greece	A	TAMU	100	Randall	Umbarger
08/31/93	M92003	<i>Aphelinus sp nr varipes</i>	China	M	Mission	600	Randall	Bushland
08/31/93	M92004	<i>Aphelinus sp nr varipes</i>	China	M	Mission	700	Randall	Bushland
08/31/93	M92005	<i>Aphelinus sp nr varipes</i>	China	M	Mission	700	Randall	Bushland
02/20/92	T91086	<i>Aphelinus sp nr. varipes</i>	Caucasus	A	TAMU	200	Randall	Bushland

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Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
03/27/92	T91086	<i>Aphelinus sp nr. varipes</i>	Caucasus	A	TAMU	45	Moore	Etter
11/04/92	*	<i>Aphelinus sp nr. varipes</i>	Uzbekistan	M	Niles	300	Randall	Bushland
11/04/92	*	<i>Aphelinus sp nr. varipes</i>	Uzbekistan	A	Niles	525	Randall	Bushland
03/25/93	T92052	<i>Aphelinus sp nr. varipes</i>	China	A	TAMU	200	Randall	Umbarger
04/14/93	T92052	<i>Aphelinus sp nr. varipes</i>	China	A	TAMU	200	Randall	Umbarger
05/14/93	T92052	<i>Aphelinus sp nr. varipes</i>	China	A	TAMU	400	Randall	Umbarger
08/17/93	M92003	<i>Aphelinus sp nr. varipes</i>	China	M	Mission	700	Randall	Bushland
08/17/93	M92004	<i>Aphelinus sp nr. varipes</i>	China	M	Mission	900	Randall	Bushland
08/17/93	M92005	<i>Aphelinus sp nr. varipes</i>	China	M	Mission	600	Randall	Bushland
08/24/93	M92003	<i>Aphelinus sp nr. varipes</i>	China	M	Mission	500	Randall	Bushland
08/24/93	M92004	<i>Aphelinus sp nr. varipes</i>	China	M	Mission	500	Randall	Bushland
08/24/93	M92005	<i>Aphelinus sp nr. varipes</i>	China	M	Mission	700	Randall	Bushland
Total		<i>Aphelinus sp nr. varipes</i>				8,490		
06/22/89	*	<i>Aphelinus sp.</i>	Turkey	A	TAMU	20	Randall	Bushland
Total		<i>Aphelinus sp.</i>				20		
08/09/91	T88029	<i>Aphelinus varipes</i>	Idaho, USA	A	TAMU	15	Randall	Bushland
04/17/92	T91036	<i>Aphelinus varipes</i>	Montana, USA	A	TAMU	100	Randall	Bushland
09/02/92	*	<i>Aphelinus varipes</i>	Germany	A	TAMU	60	Moore	Etter
05/05/93	T91036	<i>Aphelinus varipes</i>	Montana	A	TAMU	75	Randall	Umbarger
05/05/93	*	<i>Aphelinus varipes</i>	*	A	TAMU	40	Randall	Umbarger
05/14/93	*	<i>Aphelinus varipes</i>	West Germany	A	TAMU	100	Randall	Umbarger
05/14/93	T91036	<i>Aphelinus varipes</i>	Montana, USA	A	TAMU	200	Randall	Umbarger
08/17/93	EPL92-94	<i>Aphelinus varipes</i>	*	M	Riverside	2,000	Randall	Bushland
08/31/93	EPL92-94	<i>Aphelinus varipes</i>	*	M	Riverside	1,500	Randall	Bushland
Total		<i>Aphelinus varipes</i>				4,090		
03/07/90	T89025	<i>Aphidius colemani</i>	Burundi	A	TAMU	25	*	*
05/11/90	T89025	<i>Aphidius colemani</i>	Burundi	A	TAMU	65	*	*
05/18/90	T89025	<i>Aphidius colemani</i>	Burundi	A	TAMU	30	*	*
05/25/90	T89025	<i>Aphidius colemani</i>	Burundi	A	TAMU	65	*	*
08/16/91	T89019B	<i>Aphidius colemani</i>	Pakistan	M	Mission	500	Randall	Bushland
08/29/91	T89019B	<i>Aphidius colemani</i>	Pakistan	M	Mission	500	Randall	Bushland
03/27/92	T90103	<i>Aphidius colemani</i>	Brazil	A	TAMU	100	Moore	Etter
04/10/92	T90022	<i>Aphidius colemani</i>	Jordan	A	TAMU	49	Randall	Bushland

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
04/10/92	T90103	<i>Aphidius colemani</i>	Brazil	A	TAMU	130	Randall	Bushland
04/17/92	T90103	<i>Aphidius colemani</i>	Brazil	A	TAMU	15	Randall	Bushland
05/20/92	T90103	<i>Aphidius colemani</i>	Brazil	A	TAMU	150	Randall	Bushland
08/12/92	T90103	<i>Aphidius colemani</i>	Brazil	A	TAMU	30	Moore	Etter
10/21/92	T90103/104	<i>Aphidius colemani</i>	Brazil	A	TAMU	50	Moore	Etter
05/05/93	T90103/104	<i>Aphidius colemani</i>	Brazil	A	TAMU	80	Randall	Umbarger
Total		<i>Aphidius colemani</i>				1,789		
04/17/91	T90119	<i>Aphidius colemani/Diaeretiella rapae</i>	Chile	A	TAMU	70	Randall	Bushland
03/05/92	T90119	<i>Aphidius colemani/Diaeretiella rapae</i>	Chile	A	TAMU	100	Randall	Bushland
03/19/92	T90119	<i>Aphidius colemani/Diaeretiella rapae</i>	Chile	A	TAMU	75	Randall	Bushland
03/27/92	T90119	<i>Aphidius colemani/Diaeretiella rapae</i>	Chile	A	TAMU	90	Moore	Etter
04/10/92	T90119	<i>Aphidius colemani/Diaeretiella rapae</i>	Chile	A	TAMU	350	Randall	Bushland
05/08/92	T90119	<i>Aphidius colemani/Diaeretiella rapae</i>	Chile	A	TAMU	63	Randall	Bushland
05/20/92	T90119	<i>Aphidius colemani/Diaeretiella rapae</i>	Chile	A	TAMU	100	Randall	Bushland
Total		<i>Aphidius colemani/Diaeretiella rapae</i>				848		
06/22/89	T89044	<i>Aphidius ervi/uzbekistanicus</i>	Greece	A	TAMU	10	*	*
Total		<i>Aphidius ervi/uzbekistanicus</i>				10		
11/30/88	T88023	<i>Aphidius matricariae</i>	Turkey	A	TAMU	50	Randall	Bushland
11/30/88	T88057	<i>Aphidius matricariae</i>	Spain	A	TAMU	50	Randall	Bushland
06/21/89	T89040	<i>Aphidius matricariae</i>	Greece	A	TAMU	20	Randall	Bushland
06/22/89	T89049	<i>Aphidius matricariae</i>	Greece	A	TAMU	10	*	*
07/13/89	T88023	<i>Aphidius matricariae</i>	Turkey	A	TAMU	45	*	*
07/13/89	T89040	<i>Aphidius matricariae</i>	Greece	A	TAMU	100	*	*
07/13/89	T89042	<i>Aphidius matricariae</i>	Greece	A	TAMU	100	*	*
08/16/89	T89016	<i>Aphidius matricariae</i>	Iraq	A	TAMU	45	*	*
08/16/89	T89042	<i>Aphidius matricariae</i>	Greece	A	TAMU	35	*	*
03/07/90	T89046	<i>Aphidius matricariae</i>	Greece	A	TAMU	30	*	*
03/07/90	T89049	<i>Aphidius matricariae</i>	Greece	A	TAMU	75	*	*
03/07/90	T89042	<i>Aphidius matricariae</i>	Greece	A	TAMU	25	*	*
04/10/90	T89132	<i>Aphidius matricariae</i>	Kishinev	M	Mission	750	DeafSmith	Hereford
04/11/90	T89046	<i>Aphidius matricariae</i>	Greece	A	TAMU	40	*	*
04/11/90	T89049	<i>Aphidius matricariae</i>	Greece	A	TAMU	45	*	*
04/18/90	T89132	<i>Aphidius matricariae</i>	Kishinev	M	Mission	750	Carson	IBP

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
04/19/90	T89132	<i>Aphidius matricariae</i>	Kishinev	A	Mission	750	DeafSmith	Hereford
04/24/90	T89132	<i>Aphidius matricariae</i>	Kishinev	M	Mission	1,400	Carson	IBP
05/01/90	T89132	<i>Aphidius matricariae</i>	Kishinev	M	Mission	500	Carson	IBP
05/11/90	T89049	<i>Aphidius matricariae</i>	Greece	A	TAMU	30	*	*
05/18/90	T89046	<i>Aphidius matricariae</i>	Greece	A	TAMU	60	*	*
05/18/90	T89016	<i>Aphidius matricariae</i>	Iraq	A	TAMU	45	*	*
05/25/90	T89049	<i>Aphidius matricariae</i>	Greece	A	TAMU	30	*	*
06/07/90	T89132	<i>Aphidius matricariae</i>	Kishinev	M	Mission	500	Potter	Bushland
10/26/90	T89040	<i>Aphidius matricariae</i>	Greece	A	TAMU	50	*	*
07/03/91	T89016	<i>Aphidius matricariae</i>	Iraq	A	TAMU	20	Randall	Bushland
08/22/91	T89016	<i>Aphidius matricariae</i>	Iraq	M	Mission	500	Randall	Bushland
08/22/91	T89132	<i>Aphidius matricariae</i>	Kishinev	M	Mission	1,000	Randall	Bushland
08/29/91	T89016	<i>Aphidius matricariae</i>	Iraq	M	Mission	500	Randall	Bushland
08/29/91	T89132	<i>Aphidius matricariae</i>	Kishinev	M	Mission	500	Randall	Bushland
03/19/92	T90003	<i>Aphidius matricariae</i>	Pakistan	A	TAMU	75	Randall	Bushland
03/19/92	T90003	<i>Aphidius matricariae</i>	Pakistan	A	TAMU	75	Randall	Bushland
03/19/92	T91080A	<i>Aphidius matricariae</i>	Kazakhstan	A	TAMU	55	Randall	Bushland
04/10/92	T90067	<i>Aphidius matricariae</i>	Moldavia	A	TAMU	60	Randall	Bushland
04/10/92	T91080A	<i>Aphidius matricariae</i>	Kazakhstan	A	TAMU	60	Randall	Bushland
05/20/92	T90010/11	<i>Aphidius matricariae</i>	Morocco	A	TAMU	7	Randall	Bushland
05/20/92	T90067	<i>Aphidius matricariae</i>	Moldavia	A	TAMU	70	Randall	Bushland
07/08/92	T90003	<i>Aphidius matricariae</i>	Pakistan	M	Niles	563	Moore	Etter
07/15/92	T90003	<i>Aphidius matricariae</i>	Pakistan	M	Niles	1,250	Moore	Etter
07/22/92	T90003	<i>Aphidius matricariae</i>	Pakistan	M	Niles	2,600	Moore	Etter
07/29/92	T90003	<i>Aphidius matricariae</i>	Pakistan	M	Niles	1,000	Moore	Etter
08/05/92	T90003	<i>Aphidius matricariae</i>	Pakistan	M	Niles	250	Moore	Etter
08/12/92	T90003	<i>Aphidius matricariae</i>	Pakistan	A	TAMU	50	Moore	Etter
08/12/92	T90003	<i>Aphidius matricariae</i>	Pakistan	M	Niles	504	Moore	Etter
Total		<i>Aphidius matricariae</i>				14,674		
03/07/90	T89136	<i>Aphidius picipes</i>	Czechoslovakia	A	TAMU	25	*	*
04/10/90	T89136	<i>Aphidius picipes</i>	Czechoslovakia	M	Mission	1,200	DeafSmith	Hereford
04/18/90	T89136	<i>Aphidius picipes</i>	Czechoslovakia	A	Mission	2,300	Carson	IBP
04/19/90	T89136	<i>Aphidius picipes</i>	Czechoslovakia	A	Mission	1,200	DeafSmith	Hereford

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
04/24/90	T89136	<i>Aphidius picipes</i>	Czechoslovakia	M	Mission	3,500	Carson	IBP
05/01/90	T89136	<i>Aphidius picipes</i>	Czechoslovakia	M	Mission	1,150	Carson	IBP
06/07/90	T89136	<i>Aphidius picipes</i>	Czechoslovakia	M	Mission	750	Potter	Bushland
07/03/91	T89136	<i>Aphidius picipes</i>	Czechoslovakia	A	TAMU	10	Randall	Bushland
Total		<i>Aphidius picipes</i>				10,135		
11/15/88	T88024	<i>Aphidius rhopalosiphi</i>	Turkey	A	TAMU	50	Randall	Bushland
07/22/92	T92031	<i>Aphidius rhopalosiphi</i>	China	A	TAMU	15	Moore	Etter
03/25/93	T92031	<i>Aphidius rhopalosiphi</i>	China	A	TAMU	65	Randall	Umbarger
04/14/93	T92031	<i>Aphidius rhopalosiphi</i>	China	A	TAMU	30	Randall	Umbarger
05/05/93	T92031	<i>Aphidius rhopalosiphi</i>	China	A	TAMU	35	Randall	Umbarger
Total		<i>Aphidius rhopalosiphi</i>				195		
08/16/89	T89067	<i>Aphidius rhopalosiphi/Diaeretiella rapae</i>	Yugoslavia	A	TAMU	75	*	*
07/03/91	T89067	<i>Aphidius rhopalosiphi/Diaeretiella rapae</i>	Yugoslavia	A	TAMU	3	Randall	Bushland
Total		<i>Aphidius rhopalosiphi/Diaeretiella rapae</i>				78		
03/07/90	T89133	<i>Aphidius uzbekistanicus</i>	Czechoslovakia	A	TAMU	35	*	*
07/03/91	T89133	<i>Aphidius uzbekistanicus</i>	Czechoslovakia	A	TAMU	7	Randall	Bushland
Total		<i>Aphidius uzbekistanicus</i>				42		
06/22/89	T89064	<i>Diaeretiella rapae</i>	Greece	A	TAMU	60	*	*
06/22/89	T89047	<i>Diaeretiella rapae</i>	Pakistan	A	TAMU	20	*	*
08/16/89	T89015	<i>Diaeretiella rapae</i>	Pakistan	A	TAMU	25	*	*
08/16/89	T89063	<i>Diaeretiella rapae</i>	Greece	A	TAMU	30	*	*
03/07/90	T89068	<i>Diaeretiella rapae</i>	Greece	A	TAMU	20	*	*
03/07/90	T89065	<i>Diaeretiella rapae</i>	Greece	A	TAMU	50	*	*
03/07/90	T89013	<i>Diaeretiella rapae</i>	Pakistan	A	TAMU	20	*	*
03/07/90	T89032	<i>Diaeretiella rapae</i>	Spain	A	TAMU	20	*	*
03/07/90	T89063	<i>Diaeretiella rapae</i>	Greece	A	TAMU	25	*	*
04/10/90	T89013	<i>Diaeretiella rapae</i>	Pakistan	M	Mission	2,750	DeafSmith	Hereford
04/10/90	T89035/37	<i>Diaeretiella rapae</i>	Jordan	M	Mission	2,000	DeafSmith	Hereford
04/10/90	T89138	<i>Diaeretiella rapae</i>	France	M	Mission	3,000	DeafSmith	Hereford
04/11/90	T89065	<i>Diaeretiella rapae</i>	Greece	A	TAMU	30	*	*
04/18/90	T89013	<i>Diaeretiella rapae</i>	Pakistan	M	Mission	1,100	Carson	IBP
04/18/90	T89035/37	<i>Diaeretiella rapae</i>	Jordan	M	Mission	575	Carson	IBP
04/18/90	T89138	<i>Diaeretiella rapae</i>	France	M	Mission	850	Carson	IBP

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
04/19/90	T89013	<i>Diaeretiella rapae</i>	Pakistan	A	Mission	1,650	DeafSmith	Hereford
04/19/90	T89035/37	<i>Diaeretiella rapae</i>	Jordan	A	Mission	2,000	DeafSmith	Hereford
04/19/90	T89138	<i>Diaeretiella rapae</i>	France	A	Mission	3,000	DeafSmith	Hereford
04/24/90	T89013	<i>Diaeretiella rapae</i>	Pakistan	M	Mission	1,600	Carson	IBP
04/24/90	T89035/37	<i>Diaeretiella rapae</i>	Jordan	M	Mission	1,100	Carson	IBP
04/24/90	T89138	<i>Diaeretiella rapae</i>	France	M	Mission	500	Carson	IBP
04/26/90	T89015	<i>Diaeretiella rapae</i>	Pakistan	A	TAMU	30	Carson	IBP
05/01/90	T89013a	<i>Diaeretiella rapae</i>	Pakistan	M	Mission	800	Carson	IBP
05/01/90	T89035/37	<i>Diaeretiella rapae</i>	Jordan	M	Mission	600	Carson	IBP
05/01/90	T89138	<i>Diaeretiella rapae</i>	France	M	Mission	600	Carson	IBP
05/11/90	T89013	<i>Diaeretiella rapae</i>	Pakistan	A	TAMU	25 *		*
05/11/90	T89065	<i>Diaeretiella rapae</i>	Greece	A	TAMU	20 *		*
05/18/90	T89015	<i>Diaeretiella rapae</i>	Pakistan	A	TAMU	80 *		*
05/18/90	T89065	<i>Diaeretiella rapae</i>	Greece	A	TAMU	25 *		*
05/18/90	T89064	<i>Diaeretiella rapae</i>	Greece	A	TAMU	20 *		*
05/18/90	T89013	<i>Diaeretiella rapae</i>	Pakistan	A	TAMU	15 *		*
06/07/90	T89013a	<i>Diaeretiella rapae</i>	Pakistan	M	Mission	750	Potter	Bushland
06/07/90	T89035/37	<i>Diaeretiella rapae</i>	Jordan	M	Mission	750	Potter	Bushland
06/07/90	T89138	<i>Diaeretiella rapae</i>	France	M	Mission	500	Potter	Bushland
12/12/90	T89065	<i>Diaeretiella rapae</i>	Greece	A	TAMU	18	Randall	Bushland
04/17/91	T90012	<i>Diaeretiella rapae</i>	Morocco	A	TAMU	40	Randall	Bushland
04/17/91	T90051	<i>Diaeretiella rapae</i>	Iran	A	TAMU	50	Randall	Bushland
04/17/91	T90121	<i>Diaeretiella rapae</i>	Chile	A	TAMU	70	Randall	Bushland
07/03/91	T89064/68	<i>Diaeretiella rapae</i>	Greece	A	TAMU	23	Randall	Bushland
07/03/91	T90012	<i>Diaeretiella rapae</i>	Morocco	A	TAMU	35	Randall	Bushland
07/03/91	T90013	<i>Diaeretiella rapae</i>	Morocco	A	TAMU	10	Randall	Bushland
07/03/91	T91064	<i>Diaeretiella rapae</i>	Iran	A	TAMU	50	Randall	Bushland
08/09/91	T90051	<i>Diaeretiella rapae</i>	Iran	M	Riverside	725	Randall	Bushland
08/09/91	T91064	<i>Diaeretiella rapae</i>	Iran	A	TAMU	23	Randall	Bushland
08/16/91	T89161	<i>Diaeretiella rapae</i>	Kirghiz	M	Mission	500	Randall	Bushland
08/16/91	T90013	<i>Diaeretiella rapae</i>	Morocco	M	Mission	1,200	Randall	Bushland
08/16/91	T90026	<i>Diaeretiella rapae</i>	Syria	M	Mission	400	Randall	Bushland
08/16/91	T90051	<i>Diaeretiella rapae</i>	Iraq	M	Riverside	6,000	Randall	Bushland

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
08/22/91	T89161	<i>Diaeretiella rapae</i>	Kirghiz	M	Mission	500	Randall	Bushland
08/22/91	T90013	<i>Diaeretiella rapae</i>	Morocco	M	Mission	500	Randall	Bushland
08/22/91	T90026	<i>Diaeretiella rapae</i>	Syria	M	Mission	250	Randall	Bushland
08/22/91	T90051	<i>Diaeretiella rapae</i>	Iran	M	Riverside	11,000	DeafSmith	Black
08/29/91	T89161	<i>Diaeretiella rapae</i>	Kirghiz	M	Mission	1,000	Randall	Bushland
08/29/91	T90013	<i>Diaeretiella rapae</i>	Morocco	M	Mission	1,000	Randall	Bushland
08/29/91	T90026	<i>Diaeretiella rapae</i>	Syria	M	Mission	500	Randall	Bushland
08/29/91	T90051	<i>Diaeretiella rapae</i>	Iran	M	Riverside	13,600	Randall	Bushland
08/29/91	T90051	<i>Diaeretiella rapae</i>	Iran	A	Riverside	185	Randall	Bushland
02/20/92	T91037	<i>Diaeretiella rapae</i>	Pakistan	A	TAMU	30	Randall	Bushland
02/20/92	T91089	<i>Diaeretiella rapae</i>	Kazakhstan	A	TAMU	50	Randall	Bushland
03/05/92	T91050	<i>Diaeretiella rapae</i>	Iran	A	TAMU	35	Randall	Bushland
03/05/92	T91089	<i>Diaeretiella rapae</i>	Kazakhstan	A	TAMU	50	Randall	Bushland
03/19/92	T90031	<i>Diaeretiella rapae</i>	Turkey	A	TAMU	55	Randall	Bushland
03/19/92	T91050	<i>Diaeretiella rapae</i>	Iran	A	TAMU	43	Randall	Bushland
03/27/92	T91037	<i>Diaeretiella rapae</i>	Pakistan	A	TAMU	35	Moore	Etter
03/27/92	T91050	<i>Diaeretiella rapae</i>	Iran	A	TAMU	75	Moore	Etter
03/27/92	T91068	<i>Diaeretiella rapae</i>	Iran	A	TAMU	30	Moore	Etter
03/27/92	T91084	<i>Diaeretiella rapae</i>	China	A	TAMU	23	Moore	Etter
03/27/92	T91089	<i>Diaeretiella rapae</i>	Kazakhstan	A	TAMU	45	Moore	Etter
04/10/92	T90051	<i>Diaeretiella rapae</i>	Iran	A	TAMU	20	Randall	Bushland
04/10/92	T91084	<i>Diaeretiella rapae</i>	China	A	TAMU	75	Randall	Bushland
04/10/92	T91150	<i>Diaeretiella rapae</i>	Uzbekistan	A	TAMU	75	Randall	Bushland
04/17/92	T90031	<i>Diaeretiella rapae</i>	Turkey	A	TAMU	40	Randall	Bushland
04/17/92	T91050	<i>Diaeretiella rapae</i>	Iran	A	TAMU	65	Randall	Bushland
04/17/92	T91064	<i>Diaeretiella rapae</i>	Iran	A	TAMU	100	Randall	Bushland
04/24/92	T90031	<i>Diaeretiella rapae</i>	Turkey	A	TAMU	75	Randall	Bushland
04/24/92	T91037	<i>Diaeretiella rapae</i>	Pakistan	A	TAMU	60	Randall	Bushland
04/24/92	T91050	<i>Diaeretiella rapae</i>	Iran	A	TAMU	3	Randall	Bushland
05/08/92	T91037	<i>Diaeretiella rapae</i>	Pakistan	A	TAMU	50	Randall	Bushland
05/20/92	T90051	<i>Diaeretiella rapae</i>	Iran	A	TAMU	95	Randall	Bushland
05/20/92	T91037	<i>Diaeretiella rapae</i>	Pakistan	A	TAMU	60	Randall	Bushland
07/08/92	T90051	<i>Diaeretiella rapae</i>	Iran	M	Mission	725	Moore	Etter

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Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
07/08/92	T91037	<i>Diaeretiella rapae</i>	Pakistan	M	Mission	400	Moore	Etter
07/08/92	T91050	<i>Diaeretiella rapae</i>	Iran	M	Mission	250	Moore	Etter
07/08/92	T91084	<i>Diaeretiella rapae</i>	China	M	Riverside	250	Moore	Etter
07/08/92	T91089	<i>Diaeretiella rapae</i>	Kazakhstan	M	Mission	300	Moore	Etter
07/15/92	T90051	<i>Diaeretiella rapae</i>	Iran	M	Mission	1,100	Moore	Etter
07/15/92	T91037	<i>Diaeretiella rapae</i>	Pakistan	M	Mission	1,300	Moore	Etter
07/15/92	T91050	<i>Diaeretiella rapae</i>	Iran	M	Mission	500	Moore	Etter
07/15/92	T91084	<i>Diaeretiella rapae</i>	China	M	Riverside	700	Moore	Etter
07/15/92	T91089	<i>Diaeretiella rapae</i>	Kazakhstan	M	Mission	700	Moore	Etter
07/22/92	T90051	<i>Diaeretiella rapae</i>	Iran	M	Mission	2,500	Moore	Etter
07/22/92	T90051	<i>Diaeretiella rapae</i>	Iran	A	TAMU	25	Moore	Etter
07/22/92	T91037	<i>Diaeretiella rapae</i>	Pakistan	A	TAMU	50	Moore	Etter
07/22/92	T91037	<i>Diaeretiella rapae</i>	Pakistan	M	Mission	1,500	Moore	Etter
07/22/92	T91050	<i>Diaeretiella rapae</i>	Iran	M	Mission	500	Moore	Etter
07/22/92	T91084	<i>Diaeretiella rapae</i>	China	M	Riverside	500	Moore	Etter
07/22/92	T91089	<i>Diaeretiella rapae</i>	Kazakhstan	M	Mission	1,600	Moore	Etter
07/22/92	T91150	<i>Diaeretiella rapae</i>	Uzbekistan	M	Riverside	700	Moore	Etter
07/22/92	T92008	<i>Diaeretiella rapae</i>	Syria	A	TAMU	40	Moore	Etter
07/22/92	T92024	<i>Diaeretiella rapae</i>	China	A	TAMU	40	Moore	Etter
07/29/92	T91037	<i>Diaeretiella rapae</i>	Pakistan	M	Mission	500	Moore	Etter
07/29/92	T91050	<i>Diaeretiella rapae</i>	Iran	M	Mission	500	Moore	Etter
07/29/92	T90051	<i>Diaeretiella rapae</i>	Iran	M	Mission	1,000	Moore	Etter
07/29/92	T91084	<i>Diaeretiella rapae</i>	China	M	Riverside	500	Moore	Etter
07/29/92	T91089	<i>Diaeretiella rapae</i>	Kazakhstan	M	Mission	500	Moore	Etter
07/29/92	T91150	<i>Diaeretiella rapae</i>	Uzbekistan	M	Riverside	250	Moore	Etter
08/05/92	T90051	<i>Diaeretiella rapae</i>	Iran	M	Mission	1,475	Moore	Etter
08/05/92	T91037	<i>Diaeretiella rapae</i>	Pakistan	M	Mission	750	Moore	Etter
08/05/92	T91050	<i>Diaeretiella rapae</i>	Iran	M	Mission	500	Moore	Etter
08/05/92	T91084	<i>Diaeretiella rapae</i>	China	M	Riverside	200	Moore	Etter
08/05/92	T91089	<i>Diaeretiella rapae</i>	Kazakhstan	M	Mission	400	Moore	Etter
08/12/92	T90026	<i>Diaeretiella rapae</i>	Syria	M	Niles	1,250	Moore	Etter
08/12/92	T90051	<i>Diaeretiella rapae</i>	Iran	M	Mission	1,450	Moore	Etter
08/12/92	T91037	<i>Diaeretiella rapae</i>	Pakistan	A	TAMU	75	Moore	Etter

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
08/12/92	T91037	<i>Diaeretiella rapae</i>	Pakistan	M	Mission	650	Moore	Etter
08/12/92	T91050	<i>Diaeretiella rapae</i>	Iran	M	Mission	500	Moore	Etter
08/12/92	T91068	<i>Diaeretiella rapae</i>	Iran	A	TAMU	25	Moore	Etter
08/12/92	T91084	<i>Diaeretiella rapae</i>	China	M	Riverside	300	Moore	Etter
08/12/92	T91089	<i>Diaeretiella rapae</i>	Kazakhstan	M	Mission	1,000	Moore	Etter
08/12/92	T91150	<i>Diaeretiella rapae</i>	Uzbekistan	A	TAMU	40	Moore	Etter
08/12/92	T91150	<i>Diaeretiella rapae</i>	Uzbekistan	M	Riverside	200	Moore	Etter
08/12/92	T92019	<i>Diaeretiella rapae</i>	China	A	TAMU	50	Moore	Etter
08/19/92	T90026	<i>Diaeretiella rapae</i>	Syria	A	Niles	1,000	Moore	Etter
08/19/92	T90026	<i>Diaeretiella rapae</i>	Syria	M	Niles	450	Moore	Etter
08/19/92	T90051	<i>Diaeretiella rapae</i>	Iran	M	Mission	1,800	Moore	Etter
08/19/92	T91037	<i>Diaeretiella rapae</i>	Pakistan	M	Mission	1,250	Moore	Etter
08/19/92	T91050	<i>Diaeretiella rapae</i>	Iran	M	Mission	500	Moore	Etter
08/19/92	T91084	<i>Diaeretiella rapae</i>	China	M	Riverside	1,500	Moore	Etter
08/19/92	T91089	<i>Diaeretiella rapae</i>	Kazakhstan	M	Mission	3,500	Moore	Etter
08/19/92	T91068	<i>Diaeretiella rapae</i>	Iran	A	TAMU	110	Moore	Etter
08/19/92	T91084	<i>Diaeretiella rapae</i>	China	A	TAMU	80	Moore	Etter
08/19/92	T91150	<i>Diaeretiella rapae</i>	Uzbekistan	A	TAMU	25	Moore	Etter
08/19/92	T92024	<i>Diaeretiella rapae</i>	China	A	TAMU	65	Moore	Etter
08/26/92	T90026	<i>Diaeretiella rapae</i>	Syria	M	Niles	20,000	Moore	Etter
08/26/92	T90051	<i>Diaeretiella rapae</i>	Iran	M	Mission	500	Moore	Etter
08/26/92	T91037	<i>Diaeretiella rapae</i>	Pakistan	M	Mission	400	Moore	Etter
08/26/92	T91050	<i>Diaeretiella rapae</i>	Iran	M	Mission	800	Moore	Etter
08/26/92	T91084	<i>Diaeretiella rapae</i>	China	M	Riverside	600	Moore	Etter
08/26/92	T91089	<i>Diaeretiella rapae</i>	Kazakhstan	M	Mission	1,500	Moore	Etter
08/26/92	T91150	<i>Diaeretiella rapae</i>	Uzbekistan	M	Riverside	240	Moore	Etter
09/02/92	T90026	<i>Diaeretiella rapae</i>	Syria	M	Niles	9,911	Moore	Etter
09/02/92	T90026	<i>Diaeretiella rapae</i>	Syria	A	Niles	2,936	Moore	Etter
09/02/92	T90051	<i>Diaeretiella rapae</i>	Iran	M	Mission	1,150	Moore	Etter
09/02/92	T91037	<i>Diaeretiella rapae</i>	Pakistan	M	Mission	1,200	Moore	Etter
09/02/92	T91050	<i>Diaeretiella rapae</i>	Iran	M	Mission	600	Moore	Etter
09/02/92	T91068	<i>Diaeretiella rapae</i>	Iran	A	TAMU	6	Moore	Etter
09/02/92	T91068	<i>Diaeretiella rapae</i>	Iran	A	TAMU	55	Moore	Etter

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
09/02/92	T91084	<i>Diaeretiella rapae</i>	China	M	Riverside	1,000	Moore	Etter
09/02/92	T91089	<i>Diaeretiella rapae</i>	Kazakhstan	M	Mission	700	Moore	Etter
09/02/92	T92008	<i>Diaeretiella rapae</i>	Syria	A	TAMU	12	Moore	Etter
09/02/92	T92019	<i>Diaeretiella rapae</i>	China	A	TAMU	75	Moore	Etter
09/02/92	T92024	<i>Diaeretiella rapae</i>	China	A	TAMU	3	Moore	Etter
09/02/92	T92024	<i>Diaeretiella rapae</i>	China	A	TAMU	50	Moore	Etter
09/18/92	T90026	<i>Diaeretiella rapae</i>	Syria	A	Niles	1,465	Moore	Etter
11/04/92	T91089	<i>Diaeretiella rapae</i>	Kazakhstan	A	Niles	135	Randall	Bushland
11/05/92	T91089	<i>Diaeretiella rapae</i>	Kazakhstan	A	Niles	135	Moore	Etter
04/14/93	T92008	<i>Diaeretiella rapae</i>	Syria	A	TAMU	200	Randall	Umbarger
04/14/93	T92019	<i>Diaeretiella rapae</i>	China	A	TAMU	300	Randall	Umbarger
04/14/93	T92024	<i>Diaeretiella rapae</i>	China	A	TAMU	40	Randall	Umbarger
05/05/93	T92008	<i>Diaeretiella rapae</i>	Syria	A	TAMU	130	Randall	Umbarger
05/05/93	T92024	<i>Diaeretiella rapae</i>	China	A	TAMU	220	Randall	Umbarger
05/14/93	T92008	<i>Diaeretiella rapae</i>	Syria	A	TAMU	100	Randall	Umbarger
05/14/93	T92024	<i>Diaeretiella rapae</i>	China	A	TAMU	200	Randall	Umbarger
06/02/93	T92024	<i>Diaeretiella rapae</i>	China	A	TAMU	300	Randall	Bushland
08/10/93	*	<i>Diaeretiella rapae</i>	Washington, USA	A	Mission	500	Randall	Bushland
08/10/93	*	<i>Diaeretiella rapae</i>	Washington, USA	M	Mission	300	Randall	Bushland
08/10/93	T89032	<i>Diaeretiella rapae</i>	Spain	A	Mission	300	Randall	Bushland
08/10/93	T89032	<i>Diaeretiella rapae</i>	Spain	M	Mission	300	Randall	Bushland
08/10/93	T89035	<i>Diaeretiella rapae</i>	Jordan	A	Mission	300	Randall	Bushland
08/10/93	T89035	<i>Diaeretiella rapae</i>	Jordan	M	Mission	300	Randall	Bushland
08/10/93	T89047	<i>Diaeretiella rapae</i>	Pakistan	A	Mission	200	Randall	Bushland
08/10/93	T89047	<i>Diaeretiella rapae</i>	Pakistan	M	Mission	300	Randall	Bushland
08/10/93	T89065	<i>Diaeretiella rapae</i>	Greece	A	Mission	400	Randall	Bushland
08/10/93	T89065	<i>Diaeretiella rapae</i>	Greece	M	Mission	300	Randall	Bushland
08/10/93	T89113	<i>Diaeretiella rapae</i>	Syria	A	Mission	200	Randall	Bushland
08/10/93	T89113	<i>Diaeretiella rapae</i>	Syria	M	Mission	200	Randall	Bushland
08/10/93	T89161	<i>Diaeretiella rapae</i>	Kirghiz	A	Mission	400	Randall	Bushland
08/10/93	T89161	<i>Diaeretiella rapae</i>	Kirghiz	M	Mission	200	Randall	Bushland
08/17/93	M92007	<i>Diaeretiella rapae</i>	China	M	Mission	500	Randall	Bushland

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
08/17/93	M92008	<i>Diaeretiella rapae</i>	China	M	Mission	700	Randall	Bushland
08/17/93	M92011	<i>Diaeretiella rapae</i>	Spain	M	Mission	1,200	Randall	Bushland
08/17/93	M92012	<i>Diaeretiella rapae</i>	Morocco	M	Mission	500	Randall	Bushland
08/17/93	T91084	<i>Diaeretiella rapae</i>	China	M	Riverside	2,000	Randall	Bushland
08/17/93	T92019	<i>Diaeretiella rapae</i>	China	M	Riverside	500	Randall	Bushland
08/24/93	EPL92-83	<i>Diaeretiella rapae</i>	China	M	Riverside	1,000	Randall	Bushland
08/24/93	M92008	<i>Diaeretiella rapae</i>	China	M	Mission	500	Randall	Bushland
08/24/93	M92009	<i>Diaeretiella rapae</i>	Syria	M	Mission	500	Randall	Bushland
08/24/93	M92012	<i>Diaeretiella rapae</i>	Morocco	M	Mission	600	Randall	Bushland
08/24/93	T91084	<i>Diaeretiella rapae</i>	China	M	Riverside	1,500	Randall	Bushland
08/24/93	T91150	<i>Diaeretiella rapae</i>	Uzbekistan	M	Niles	500	Randall	Bushland
08/24/93	T92019	<i>Diaeretiella rapae</i>	China	M	Riverside	1,000	Randall	Bushland
08/31/93	EPL92-83	<i>Diaeretiella rapae</i>	China	M	Riverside	500	Randall	Bushland
08/31/93	M92008	<i>Diaeretiella rapae</i>	China	M	Mission	500	Randall	Bushland
08/31/93	M92009	<i>Diaeretiella rapae</i>	Syria	M	Mission	550	Randall	Bushland
08/31/93	M92011	<i>Diaeretiella rapae</i>	Spain	M	Mission	600	Randall	Bushland
08/31/93	M92012	<i>Diaeretiella rapae</i>	Morocco	M	Mission	600	Randall	Bushland
08/31/93	T91084	<i>Diaeretiella rapae</i>	China	M	Riverside	1,000	Randall	Bushland
08/31/93	T91150	<i>Diaeretiella rapae</i>	Uzbekistan	M	Niles	1,450	Randall	Bushland
08/31/93	T92019	<i>Diaeretiella rapae</i>	China	M	Riverside	700	Randall	Bushland
Total		<i>Diaeretiella rapae</i>				165,646		
07/03/91	T89067	<i>Diaeretiella rapae/Aphidius rhopalosiphi</i>	Yugoslavia	A	TAMU	3	Randall	Bushland
Total		<i>Diaeretiella rapae/Aphidius rhopalosiphi</i>				3		
08/16/89	T89027	<i>Ephedrus cerasicola</i>	Norway	A	TAMU	50	Randall	Bushland
05/11/90	T89027	<i>Ephedrus cerasicola</i>	Norway	A	TAMU	20	Randall	Bushland
05/25/90	T89027	<i>Ephedrus cerasicola</i>	Norway	A	TAMU	20	Randall	Bushland
Total		<i>Ephedrus cerasicola</i>				96		
11/15/88	T88030	<i>Ephedrus plagiator</i>	Turkey	A	TAMU	100	Randall	Bushland
11/30/88	T88030	<i>Ephedrus plagiator</i>	Turkey	A	TAMU	100	Randall	Bushland
07/22/92	T92033	<i>Ephedrus plagiator</i>	China	A	TAMU	30	Moore	Etter
08/12/92	T92033	<i>Ephedrus plagiator</i>	China	A	TAMU	100	Moore	Etter
09/02/92	T92033	<i>Ephedrus plagiator</i>	China	A	TAMU	200	Moore	Etter
10/14/92	T92033	<i>Ephedrus plagiator</i>	China	A	TAMU	250	Moore	Etter

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
10/21/92	T92033	<i>Ephedrus plagiator</i>	China	A	TAMU	65	Moore	Etter
06/02/93	T92033	<i>Ephedrus plagiator</i>	China	A	TAMU	500	Randall	Bushland
08/17/93	M92010	<i>Ephedrus plagiator</i>	China	M	Mission	1,100	Randall	Bushland
08/24/93	M92010	<i>Ephedrus plagiator</i>	China	M	Mission	500	Randall	Bushland
08/31/93	M92010	<i>Ephedrus plagiator</i>	China	M	Mission	1,000	Randall	Bushland
Total		<i>Ephedrus plagiator</i>				3,945		
11/15/88	T88032	<i>Praon gallicum</i>	Turkey	A	TAMU	50	Randall	Bushland
11/15/88	T88033	<i>Praon gallicum</i>	Turkey	A	TAMU	50	Randall	Bushland
07/13/89	T88032	<i>Praon gallicum</i>	France	A	TAMU	100 *		*
Total		<i>Praon gallicum</i>				200		
Total parasitic Hymenoptera						474,810		

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
Predaceous Coccinellidae								
08/19/91	BCWLSA9006	<i>Cycloneda ancoralis</i>	Argentina	E	Niles	1,122	Parmer	Black
08/19/91	BCWLSA9006	<i>Cycloneda ancoralis</i>	Argentina	E	Niles	731	Parmer	Black
08/22/91	BCWLSA9006	<i>Cycloneda ancoralis</i>	Argentina	E	Niles	1,332	Randall	Bushland
08/22/91	BCWLSA9006	<i>Cycloneda ancoralis</i>	Argentina	E	Niles	1,394	Randall	Bushland
08/22/91	BCWLSA9006	<i>Cycloneda ancoralis</i>	Argentina	A	Niles	59	Randall	Bushland
08/29/91	BCWLSA9006	<i>Cycloneda ancoralis</i>	Argentina	E	Niles	862	Randall	Bushland
08/12/92	BCWLSA9006	<i>Cycloneda ancoralis</i>	Argentina	E	Niles	259	Moore	Etter
08/19/92	BCWLSA9006	<i>Cycloneda ancoralis</i>	Argentina	E	Niles	270	Moore	Etter
08/26/92	BCWLSA9006	<i>Cycloneda ancoralis</i>	Argentina	E	Niles	150	Moore	Etter
09/02/92	BCWLSA9006	<i>Cycloneda ancoralis</i>	Argentina	E	Niles	962	Moore	Etter
09/18/92	BCWLSA9006	<i>Cycloneda ancoralis</i>	Argentina	E	Niles	1,085	Moore	Etter
Total		<i>Cycloneda ancoralis</i>				8,226		
08/19/91	BCWLSA9006	<i>Eriopis connexa</i>	Argentina	E	Niles	541	Parmer	Black
08/22/91	BCWLSA9006	<i>Eriopis connexa</i>	Argentina	A	Niles	16	Randall	Bushland
08/29/91	BCWLSA9006	<i>Eriopis connexa</i>	Argentina	E	Niles	947	Randall	Bushland
Total		<i>Eriopis connexa</i>				1,504		
04/30/87	*	<i>Hippodamia variegata</i>	*	A	Niles	8,332	Deaf Smith	Hereford
04/11/90	BIRL87205	<i>Hippodamia variegata</i>	Canada	4	Niles	250	Randall	Bushland
04/11/90	EPL8941	<i>Hippodamia variegata</i>	Moldavia	4	Niles	250	Randall	Bushland
04/11/90	EPL8989	<i>Hippodamia variegata</i>	Kirghizia	4	Niles	250	Randall	Bushland
06/01/90	BIRL87205	<i>Hippodamia variegata</i>	Canada	A	Niles	250	Randall	Bushland
06/01/90	EPL8852	<i>Hippodamia variegata</i>	France	A	Niles	250	Randall	Bushland
06/01/90	EPL8941	<i>Hippodamia variegata</i>	Moldavia	A	Niles	250	Randall	Bushland
06/01/90	EPL8989	<i>Hippodamia variegata</i>	Kirghizia	A	Niles	250	Randall	Bushland
11/15/90	BIRL87205	<i>Hippodamia variegata</i>	Canada	A	Niles	750	Randall	Bushland
11/15/90	EPL8941	<i>Hippodamia variegata</i>	Moldavia	A	Niles	750	Randall	Bushland
11/15/90	EPL8989	<i>Hippodamia variegata</i>	Kirghizia	A	Niles	750	Randall	Bushland
11/15/90	T90015	<i>Hippodamia variegata</i>	Morocco	A	Niles	750	Randall	Bushland
08/19/91	EPL8941	<i>Hippodamia variegata</i>	Moldavia	E	Niles	1,504	Parmer	Black
08/19/91	EPL8989	<i>Hippodamia variegata</i>	Kirghizia	A	Niles	78	Parmer	Black
08/19/91	EPL8989	<i>Hippodamia variegata</i>	Kirghizia	E	Niles	272	Parmer	Black
08/19/91	PSRF90002	<i>Hippodamia variegata</i>	Chile	E	Niles	910	Parmer	Black

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
08/19/91	T90015	<i>Hippodamia variegata</i>	Morocco	E	Niles	717	Parmer	Black
08/22/91	EPL8941	<i>Hippodamia variegata</i>	Moldavia	E	Niles	1,647	Randall	Bushland
08/22/91	EPL8989	<i>Hippodamia variegata</i>	Kirghizia	A	Niles	25	Randall	Bushland
08/22/91	PSRF90002	<i>Hippodamia variegata</i>	Chile	E	Niles	338	Randall	Bushland
08/29/91	EPL8941	<i>Hippodamia variegata</i>	Moldavia	E	Niles	1,781	Randall	Bushland
08/29/91	T90015	<i>Hippodamia variegata</i>	Morocco	A	Niles	39	Randall	Bushland
07/15/92	EPL91-10	<i>Hippodamia variegata</i>	Kazakhstan	E	Niles	3,105	Moore	Etter
07/15/92	EPL91-10	<i>Hippodamia variegata</i>	Kazakhstan	A	Niles	10	Moore	Etter
07/15/92	PSRF90002	<i>Hippodamia variegata</i>	Chile	E	Niles	825	Moore	Etter
07/15/92	T90015	<i>Hippodamia variegata</i>	Morocco	E	Niles	490	Moore	Etter
07/22/92	EPL91-10	<i>Hippodamia variegata</i>	Kazakhstan	E	Niles	2,808	Moore	Etter
07/22/92	PSRF90002	<i>Hippodamia variegata</i>	Chile	E	Niles	983	Moore	Etter
07/29/92	*	<i>Hippodamia variegata</i>	Kirghizia	A	Niles	25	Moore	Etter
07/29/92	EPL91-10	<i>Hippodamia variegata</i>	Kazakhstan	A	Niles	12	Moore	Etter
07/29/92	EPL91-10	<i>Hippodamia variegata</i>	Kazakhstan	E	Niles	1,171	Moore	Etter
07/29/92	PSRF90002	<i>Hippodamia variegata</i>	Chile	E	Niles	1,374	Moore	Etter
08/05/92	EPL91-10	<i>Hippodamia variegata</i>	Kazakhstan	A	Niles	250	Moore	Etter
08/05/92	EPL91-10	<i>Hippodamia variegata</i>	Kazakhstan	A	Niles	1	Moore	Etter
08/05/92	PSRF90002	<i>Hippodamia variegata</i>	Chile	A	Niles	250	Moore	Etter
08/05/92	PSRF90002	<i>Hippodamia variegata</i>	Chile	A	Niles	11	Moore	Etter
08/05/92	PSRF90002	<i>Hippodamia variegata</i>	Chile	E	Niles	1,680	Moore	Etter
08/12/92	EPL91-10	<i>Hippodamia variegata</i>	Kazakhstan	A	Niles	250	Moore	Etter
08/12/92	PSRF90002	<i>Hippodamia variegata</i>	Chile	A	Niles	250	Moore	Etter
08/12/92	PSRF90002	<i>Hippodamia variegata</i>	Chile	E	Niles	2,620	Moore	Etter
08/12/92	T90015	<i>Hippodamia variegata</i>	Morocco	E	Niles	1,388	Moore	Etter
08/12/92	T92012	<i>Hippodamia variegata</i>	Syria	A	TAMU	2	Moore	Etter
08/12/92	T92012	<i>Hippodamia variegata</i>	Syria	L	TAMU	22	Moore	Etter
08/12/92	T92012	<i>Hippodamia variegata</i>	Syria	P	TAMU	2	Moore	Etter
08/19/92	EPL91-10	<i>Hippodamia variegata</i>	Kazakhstan	E	Niles	1,221	Moore	Etter
08/19/92	EPL91-10	<i>Hippodamia variegata</i>	Kazakhstan	A	Niles	250	Moore	Etter
08/19/92	PSRF90002	<i>Hippodamia variegata</i>	Chile	E	Niles	2,461	Moore	Etter
08/19/92	PSRF90002	<i>Hippodamia variegata</i>	Chile	A	Niles	250	Moore	Etter
08/19/92	T90015	<i>Hippodamia variegata</i>	Morocco	E	Niles	2,085	Moore	Etter

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
08/26/92	EPL91-10	<i>Hippodamia variegata</i>	Kazakhstan	A	Niles	485	Moore	Etter
08/26/92	EPL91-10	<i>Hippodamia variegata</i>	Kazakhstan	E	Niles	3,634	Moore	Etter
08/26/92	PSRF90002	<i>Hippodamia variegata</i>	Chile	A	Niles	500	Moore	Etter
08/26/92	PSRF90002	<i>Hippodamia variegata</i>	Chile	E	Niles	3,434	Moore	Etter
08/26/92	T90015	<i>Hippodamia variegata</i>	Morocco	E	Niles	1,485	Moore	Etter
09/02/92	EPL8941	<i>Hippodamia variegata</i>	Moldavia	A	Niles	30	Moore	Etter
09/02/92	EPL91-10	<i>Hippodamia variegata</i>	Kazakhstan	E	Niles	1,611	Moore	Etter
09/02/92	EPL91-10	<i>Hippodamia variegata</i>	Kazakhstan	A	Niles	252	Moore	Etter
09/02/92	PSRF90002	<i>Hippodamia variegata</i>	Chile	A	Niles	236	Moore	Etter
09/02/92	PSRF90002	<i>Hippodamia variegata</i>	Chile	E	Niles	2,121	Moore	Etter
09/18/92	EPL91-10	<i>Hippodamia variegata</i>	Kazakhstan	E	Niles	3,993	Moore	Etter
09/18/92	PSRF90002	<i>Hippodamia variegata</i>	Chile	E	Niles	932	Moore	Etter
09/18/92	T90015	<i>Hippodamia variegata</i>	Morocco	E	Niles	220	Moore	Etter
08/17/93	EPL91-10	<i>Hippodamia variegata</i>	Kazakhstan	A	Niles	272	Randall	Bushland
08/17/93	EPL91-10	<i>Hippodamia variegata</i>	Kazakhstan	A	Niles	470	Randall	Bushland
08/24/93	EPL91-10	<i>Hippodamia variegata</i>	Kazakhstan	A	Niles	264	Randall	Bushland
08/24/93	EPL92-68	<i>Hippodamia variegata</i>	China	A	Niles	491	Randall	Bushland
08/31/93	EPL91-10	<i>Hippodamia variegata</i>	Kazakhstan	A	Niles	208	Randall	Bushland
08/31/93	EPL92-68	<i>Hippodamia variegata</i>	China	A	Niles	496	Randall	Bushland
Total		<i>Hippodamia variegata</i>				65,323		
08/19/91	EPL90051	<i>Oenopia conglobata</i>	Uzbekistan	E	Niles	1,987	Parmer	Black
08/22/91	EPL90051	<i>Oenopia conglobata</i>	Uzbekistan	E	Niles	644	Randall	Bushland
08/22/91	EPL90051	<i>Oenopia conglobata</i>	Uzbekistan	A	Niles	12	Randall	Bushland
08/29/91	EPL90051	<i>Oenopia conglobata</i>	Uzbekistan	E	Niles	774	Randall	Bushland
07/15/92	EPL90051	<i>Oenopia conglobata</i>	Uzbekistan	E	Niles	510	Moore	Etter
08/05/92	EPL90051	<i>Oenopia conglobata</i>	Uzbekistan	A	Niles	3	Moore	Etter
08/12/92	EPL90051	<i>Oenopia conglobata</i>	Uzbekistan	E	Niles	17	Moore	Etter
08/19/92	EPL90051	<i>Oenopia conglobata</i>	Uzbekistan	E	Niles	415	Moore	Etter
08/26/92	EPL90051	<i>Oenopia conglobata</i>	Uzbekistan	E	Niles	1,911	Moore	Etter
09/02/92	EPL90051	<i>Oenopia conglobata</i>	Uzbekistan	E	Niles	382	Moore	Etter
Total		<i>Oenopia conglobata</i>				6,655		
04/30/87	*	<i>Propylea quatuordecimpunctata</i>	*	A	Niles	5,348	Deaf Smith	Hereford
04/11/90	EPL8851	<i>Propylea quatuordecimpunctata</i>	Turkey	A	Niles	250	Randall	Bushland

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
04/11/90	EPL8940	<i>Propylea quatuordecimpunctata</i>	Ukraine	A	Niles	250	Randall	Bushland
06/01/90	EPL8851	<i>Propylea quatuordecimpunctata</i>	Turkey	A	Niles	232	Randall	Bushland
06/01/90	EPL8940	<i>Propylea quatuordecimpunctata</i>	Ukraine	A	Niles	250	Randall	Bushland
11/15/90	EPL8940	<i>Propylea quatuordecimpunctata</i>	Ukraine	A	Niles	750	Randall	Bushland
08/19/91	EPL8851	<i>Propylea quatuordecimpunctata</i>	Turkey	E	Niles	1,186	Parmer	Black
08/19/91	EPL8940/107	<i>Propylea quatuordecimpunctata</i>	Ukraine	A	Niles	9	Parmer	Black
08/19/91	EPL8940/107	<i>Propylea quatuordecimpunctata</i>	Ukraine	E	Niles	6,936	Parmer	Black
08/22/91	EPL8851	<i>Propylea quatuordecimpunctata</i>	Turkey	E	Niles	652	Randall	Bushland
08/22/91	EPL8851	<i>Propylea quatuordecimpunctata</i>	Turkey	A	Niles	69	Randall	Bushland
08/22/91	EPL8940/107	<i>Propylea quatuordecimpunctata</i>	Ukraine	E	Niles	3,941	Randall	Bushland
08/29/91	EPL8940/107	<i>Propylea quatuordecimpunctata</i>	Ukraine	E	Niles	3,088	Randall	Bushland

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
07/08/92	EPL91-10	<i>Propylea quatuordecimpunctata</i>	Kazakhstan	A	Niles	500	Moore	Etter
07/08/92	EPL91-10	<i>Propylea quatuordecimpunctata</i>	Kazakhstan	A	Niles	500	Moore	Etter
07/15/92	EPL91-10	<i>Propylea quatuordecimpunctata</i>	Kazakhstan	A	Niles	927	Moore	Etter
07/15/92	EPL91-10	<i>Propylea quatuordecimpunctata</i>	Kazakhstan	A	Niles	1,021	Moore	Etter
07/22/92	EPL91-10	<i>Propylea quatuordecimpunctata</i>	Kazakhstan	A	Niles	685	Moore	Etter
07/22/92	EPL91-10	<i>Propylea quatuordecimpunctata</i>	Kazakhstan	A	Niles	734	Moore	Etter
07/29/92	EPL91-10	<i>Propylea quatuordecimpunctata</i>	Kazakhstan	A	Niles	245	Moore	Etter
08/05/92	EPL91-10	<i>Propylea quatuordecimpunctata</i>	Kazakhstan	A	Niles	495	Moore	Etter
08/12/92	EPL91-10	<i>Propylea quatuordecimpunctata</i>	Kazakhstan	E	Niles	277	Moore	Etter
08/12/92	EPL91-10	<i>Propylea quatuordecimpunctata</i>	Kazakhstan	A	Niles	563	Moore	Etter
08/19/92	EPL91-10	<i>Propylea quatuordecimpunctata</i>	Kazakhstan	E	Niles	900	Moore	Etter
08/26/92	EPL91-10	<i>Propylea quatuordecimpunctata</i>	Kazakhstan	E	Niles	823	Moore	Etter
08/26/92	EPL91-10	<i>Propylea quatuordecimpunctata</i>	Kazakhstan	A	Niles	480	Moore	Etter
09/02/92	*	<i>Propylea quatuordecimpunctata</i>	*	A	Niles	13	Moore	Etter
09/02/92	EPL91-10	<i>Propylea quatuordecimpunctata</i>	Kazakhstan	E	Niles	1,317	Moore	Etter
09/02/92	EPL91-10	<i>Propylea quatuordecimpunctata</i>	Kazakhstan	A	Niles	229	Moore	Etter
09/18/92	EPL91-10	<i>Propylea quatuordecimpunctata</i>	Kazakhstan	E	Niles	1,934	Moore	Etter
09/18/92	EPL91-10	<i>Propylea quatuordecimpunctata</i>	Kazakhstan	E	Niles	4,679	Moore	Etter
08/17/93	EPL91-10	<i>Propylea quatuordecimpunctata</i>	Kirghizia	A	Niles	760	Randall	Bushland
08/17/93	EPL91-10	<i>Propylea quatuordecimpunctata</i>	Kazakhstan	A	Niles	982	Randall	Bushland
08/24/93	EPL91-10	<i>Propylea quatuordecimpunctata</i>	*	A	Niles	733	Randall	Bushland
08/24/93	EPL91-10	<i>Propylea quatuordecimpunctata</i>	*	A	Niles	995	Randall	Bushland
08/31/93	EPL91-10	<i>Propylea quatuordecimpunctata</i>	Kirghizia	A	Niles	744	Randall	Bushland
08/31/93	EPL91-10	<i>Propylea quatuordecimpunctata</i>	Kazakhstan	A	Niles	1,000	Randall	Bushland
Total		<i>Propylea quatuordecimpunctata</i>				44,497		
04/11/90	EPL8850	<i>Scymnus frontalis</i>	Turkey	A	Niles	250	Randall	Bushland
06/01/90	EPL8850	<i>Scymnus frontalis</i>	Turkey	A	Niles	250	Randall	Bushland
11/15/90	EPL8850	<i>Scymnus frontalis</i>	Turkey	A	Niles	750	Randall	Bushland
Total		<i>Scymnus frontalis</i>				1,250		
04/11/90	EPL89103	<i>Semiadalia undecimnotata</i>	Ukraine	4	Niles	250	Randall	Bushland
06/01/90	EPL89103	<i>Semiadalia undecimnotata</i>	Ukraine	E	Niles	500	Randall	Bushland
08/19/91	EPL89103	<i>Semiadalia undecimnotata</i>	Ukraine	E	Niles	968	Parmer	Black
08/22/91	EPL89103	<i>Semiadalia undecimnotata</i>	Ukraine	E	Niles	467	Randall	Bushland

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
08/29/91	EPL89103	<i>Semiadalia undecimnotata</i>	Ukraine	E	Niles	401	Randall	Bushland
08/12/92	EPL89103	<i>Semiadalia undecimnotata</i>	Ukraine	E	Niles	74	Moore	Etter
08/19/92	EPL89103	<i>Semiadalia undecimnotata</i>	Ukraine	E	Niles	50	Moore	Etter
08/26/92	EPL89103	<i>Semiadalia undecimnotata</i>	Ukraine	E	Niles	255	Moore	Etter
09/02/92	EPL89103	<i>Semiadalia undecimnotata</i>	Ukraine	E	Niles	149	Moore	Etter
09/18/92	EPL89103	<i>Semiadalia undecimnotata</i>	Ukraine	E	Niles	65	Moore	Etter
Total		<i>Semiadalia undecimnotata</i>				3,179		
Total predaceous Coccinellidae						130,634		
07/15/92	T91059	<i>Eupeodes nuba</i>	Kazakhstan	E	Niles	4,448	Moore	Etter
07/15/92	T91059	<i>Eupeodes nuba</i>	Kazakhstan	A	Niles	265	Moore	Etter
07/15/92	T91065	<i>Eupeodes nuba</i>	Iran	E	Niles	5,960	Moore	Etter
07/15/92	T91065	<i>Eupeodes nuba</i>	Iran	A	Niles	240	Moore	Etter
07/22/92	T91059	<i>Eupeodes nuba</i>	Kazakhstan	A	Niles	445	Moore	Etter
07/22/92	T91059	<i>Eupeodes nuba</i>	Kazakhstan	E	Niles	1,587	Moore	Etter
07/22/92	T91065	<i>Eupeodes nuba</i>	Iran	A	Niles	556	Moore	Etter
07/22/92	T91065	<i>Eupeodes nuba</i>	Iran	E	Niles	4,651	Moore	Etter
07/29/92	T91059	<i>Eupeodes nuba</i>	Kazakhstan	E	Niles	958	Moore	Etter
07/29/92	T91059	<i>Eupeodes nuba</i>	Kazakhstan	A	Niles	300	Moore	Etter
07/29/92	T91065	<i>Eupeodes nuba</i>	Iran	E	Niles	2,212	Moore	Etter
07/29/92	T91065	<i>Eupeodes nuba</i>	Iran	A	Niles	300	Moore	Etter
08/05/92	T91059	<i>Eupeodes nuba</i>	Kazakhstan	A	Niles	300	Moore	Etter
08/05/92	T91059	<i>Eupeodes nuba</i>	Kazakhstan	E	Niles	985	Moore	Etter
08/05/92	T91065	<i>Eupeodes nuba</i>	Iran	A	Niles	300	Moore	Etter
08/05/92	T91065	<i>Eupeodes nuba</i>	Iran	E	Niles	2,700	Moore	Etter
08/12/92	T91059	<i>Eupeodes nuba</i>	Kazakhstan	E	Niles	3,263	Moore	Etter
08/12/92	T91059	<i>Eupeodes nuba</i>	Kazakhstan	A	Niles	307	Moore	Etter
08/12/92	T91065	<i>Eupeodes nuba</i>	Iran	E	Niles	6,057	Moore	Etter
08/12/92	T91065	<i>Eupeodes nuba</i>	Iran	A	Niles	452	Moore	Etter
08/19/92	T91059	<i>Eupeodes nuba</i>	Kazakhstan	E	Niles	3,405	Moore	Etter
08/19/92	T91059	<i>Eupeodes nuba</i>	Kazakhstan	A	Niles	204	Moore	Etter
08/19/92	T91065	<i>Eupeodes nuba</i>	Iran	E	Niles	4,555	Moore	Etter
08/19/92	T91065	<i>Eupeodes nuba</i>	Iran	A	Niles	255	Moore	Etter
08/26/92	T91059	<i>Eupeodes nuba</i>	Kazakhstan	A	Niles	350	Moore	Etter

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
08/26/92	T91065	<i>Eupeodes nuba</i>	Iran	A	Niles	350	Moore	Etter
08/26/92	T91065	<i>Eupeodes nuba</i>	Iran	E	Niles	2,296	Moore	Etter
09/02/92	T91059	<i>Eupeodes nuba</i>	Kazakhstan	A	Niles	511	Moore	Etter
09/02/92	T91059	<i>Eupeodes nuba</i>	Kazakhstan	E	Niles	708	Moore	Etter
09/02/92	T91065	<i>Eupeodes nuba</i>	Iran	A	Niles	810	Moore	Etter
09/02/92	T91065	<i>Eupeodes nuba</i>	Iran	E	Niles	2,230	Moore	Etter
09/18/92	T91059	<i>Eupeodes nuba</i>	Kazakhstan	A	Niles	408	Moore	Etter
09/18/92	T91065	<i>Eupeodes nuba</i>	Iran	E	Niles	1,123	Moore	Etter
09/18/92	T91065	<i>Eupeodes nuba</i>	Iran	A	Niles	543	Moore	Etter
08/17/93	T91059	<i>Eupeodes nuba</i>	Kazakhstan	A	Niles	61	Randall	Bushland
08/17/93	T91059	<i>Eupeodes nuba</i>	Kazakhstan	E	Niles	5,325	Randall	Bushland
08/17/93	T91065	<i>Eupeodes nuba</i>	Iran	A	Niles	321	Randall	Bushland
08/17/93	T91065	<i>Eupeodes nuba</i>	Iran	E	Niles	4,636	Randall	Bushland
08/24/93	T91059	<i>Eupeodes nuba</i>	Kazakhstan	A	Niles	143	Randall	Bushland
08/24/93	T91065	<i>Eupeodes nuba</i>	Iran	A	Niles	115	Randall	Bushland
08/31/93	T91059	<i>Eupeodes nuba</i>	Kazakhstan	A	Niles	100	Randall	Bushland
08/31/93	T91065	<i>Eupeodes nuba</i>	Iran	A	Niles	100	Randall	Bushland
Total		<i>Eupeodes nuba</i>				64,835		
03/07/90	T89066	<i>Leucopis ninae</i>	Yugoslavia	A	TAMU	100	*	*
04/11/90	T89066	<i>Leucopis ninae</i>	Yugoslavia	A	TAMU	250	*	*
04/26/90	T89066	<i>Leucopis ninae</i>	Yugoslavia	A	TAMU	200	Carson	IBP
05/05/90	T92010	<i>Leucopis ninae</i>	Syria	A	TAMU	11	Randall	Umbarger
10/26/90	T89066	<i>Leucopis ninae</i>	Yugoslavia	A	TAMU	50	*	*
12/12/90	T89066	<i>Leucopis ninae</i>	Yugoslavia	A	TAMU	50	Randall	Bushland
08/15/91	T89066	<i>Leucopis ninae</i>	Yugoslavia	A	Niles	2,169	Randall	Bushland
08/22/91	T89066	<i>Leucopis ninae</i>	Yugoslavia	A	Niles	1,000	Randall	Bushland
08/29/91	T89066	<i>Leucopis ninae</i>	Yugoslavia	A	Niles	1,505	Randall	Bushland
02/20/92	T91085	<i>Leucopis ninae</i>	China	A	TAMU	400	Randall	Bushland
03/05/92	T91056	<i>Leucopis ninae</i>	Yugoslavia	A	TAMU	35	Randall	Bushland
03/19/92	T91098	<i>Leucopis ninae</i>	Kirghizia	A	TAMU	75	Randall	Bushland
03/19/92	T91108	<i>Leucopis ninae</i>	China	A	TAMU	76	Randall	Bushland
03/27/92	T91056	<i>Leucopis ninae</i>	Yugoslavia	A	TAMU	120	Moore	Etter
03/27/92	T91098	<i>Leucopis ninae</i>	Kirghizia	A	TAMU	150	Moore	Etter

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Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
03/27/92	T91103/108	<i>Leucopis ninae</i>	China	A	TAMU	25	Moore	Etter
03/27/92	T91108	<i>Leucopis ninae</i>	China	A	TAMU	100	Moore	Etter
04/10/92	T91098	<i>Leucopis ninae</i>	Kirghizia	A	TAMU	50	Randall	Bushland
04/10/92	T91108	<i>Leucopis ninae</i>	China	A	TAMU	55	Randall	Bushland
04/10/92	T91103/108	<i>Leucopis ninae</i>	China	A	TAMU	100	Randall	Bushland
04/17/92	T91098	<i>Leucopis ninae</i>	Kirghizia	A	TAMU	38	Randall	Bushland
04/17/92	T91108	<i>Leucopis ninae</i>	China	A	TAMU	55	Randall	Bushland
04/17/92	T91108/103	<i>Leucopis ninae</i>	China	A	TAMU	50	Randall	Bushland
04/24/92	T91098	<i>Leucopis ninae</i>	Kirghizia	A	TAMU	36	Randall	Bushland
04/24/92	T91103	<i>Leucopis ninae</i>	China	A	TAMU	60	Randall	Bushland
04/24/92	T91108/103	<i>Leucopis ninae</i>	China	A	TAMU	22	Randall	Bushland
05/08/92	T91098	<i>Leucopis ninae</i>	Kirghizia	A	TAMU	2	Randall	Bushland
05/08/92	T91103	<i>Leucopis ninae</i>	China	A	TAMU	45	Randall	Bushland
05/08/92	T91108	<i>Leucopis ninae</i>	China	A	TAMU	20	Randall	Bushland
05/20/92	T91056	<i>Leucopis ninae</i>	Pakistan	A	TAMU	75	Randall	Bushland
07/08/92	T91056	<i>Leucopis ninae</i>	Pakistan	A	Niles	211	Moore	Etter
07/08/92	T91066	<i>Leucopis ninae</i>	Iran	A	Niles	94	Moore	Etter
07/08/92	T91083	<i>Leucopis ninae</i>	Uzbekistan	A	Niles	500	Moore	Etter
07/08/92	T91095	<i>Leucopis ninae</i>	China	A	Niles	250	Moore	Etter
07/15/92	T91056	<i>Leucopis ninae</i>	Pakistan	A	Niles	142	Moore	Etter
07/15/92	T91066	<i>Leucopis ninae</i>	Iran	A	Niles	129	Moore	Etter
07/15/92	T91083	<i>Leucopis ninae</i>	Uzbekistan	A	Niles	680	Moore	Etter
07/15/92	T91083	<i>Leucopis ninae</i>	Uzbekistan	E	Niles	318	Moore	Etter
07/15/92	T91085	<i>Leucopis ninae</i>	China	A	Niles	327	Moore	Etter
07/15/92	T91095	<i>Leucopis ninae</i>	China	A	Niles	789	Moore	Etter
07/22/92	T91056	<i>Leucopis ninae</i>	Pakistan	A	TAMU	100	Moore	Etter
07/22/92	T91056	<i>Leucopis ninae</i>	Pakistan	A	Niles	739	Moore	Etter
07/22/92	T91066	<i>Leucopis ninae</i>	Iran	A	Niles	400	Moore	Etter
07/22/92	T91083	<i>Leucopis ninae</i>	Uzbekistan	A	Niles	582	Moore	Etter
07/22/92	T91085	<i>Leucopis ninae</i>	China	A	Niles	266	Moore	Etter
07/22/92	T91095	<i>Leucopis ninae</i>	China	A	Niles	1,622	Moore	Etter
07/29/92	T91056	<i>Leucopis ninae</i>	Pakistan	A	Niles	500	Moore	Etter
07/29/92	T91066	<i>Leucopis ninae</i>	Iran	A	Niles	354	Moore	Etter

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
07/29/92	T91083	<i>Leucopis ninae</i>	Uzbekistan	A	Niles	309	Moore	Etter
07/29/92	T91083	<i>Leucopis ninae</i>	Uzbekistan	E	Niles	1,700	Moore	Etter
07/29/92	T91085	<i>Leucopis ninae</i>	China	A	Niles	186	Moore	Etter
07/29/92	T91095	<i>Leucopis ninae</i>	China	A	Niles	1,000	Moore	Etter
08/05/92	T91056	<i>Leucopis ninae</i>	Pakistan	A	Niles	401	Moore	Etter
08/05/92	T91066	<i>Leucopis ninae</i>	Iran	A	Niles	325	Moore	Etter
08/05/92	T91083	<i>Leucopis ninae</i>	Uzbekistan	A	Niles	240	Moore	Etter
08/05/92	T91083	<i>Leucopis ninae</i>	Uzbekistan	E	Niles	4,120	Moore	Etter
08/05/92	T91085	<i>Leucopis ninae</i>	China	A	Niles	127	Moore	Etter
08/05/92	T91095	<i>Leucopis ninae</i>	China	A	Niles	882	Moore	Etter
08/12/92	T91056	<i>Leucopis ninae</i>	Pakistan	A	TAMU	100	Moore	Etter
08/12/92	T91056	<i>Leucopis ninae</i>	Pakistan	A	Niles	1,010	Moore	Etter
08/12/92	T91066	<i>Leucopis ninae</i>	Iran	A	Niles	510	Moore	Etter
08/12/92	T91083	<i>Leucopis ninae</i>	Uzbekistan	E	Niles	810	Moore	Etter
08/12/92	T91083	<i>Leucopis ninae</i>	Uzbekistan	A	Niles	250	Moore	Etter
08/12/92	T91085	<i>Leucopis ninae</i>	China	A	Niles	106	Moore	Etter
08/12/92	T91095	<i>Leucopis ninae</i>	China	A	Niles	1,584	Moore	Etter
08/19/92	T91056	<i>Leucopis ninae</i>	Pakistan	A	Niles	1,195	Moore	Etter
08/19/92	T91066	<i>Leucopis ninae</i>	Iran	A	Niles	734	Moore	Etter
08/19/92	T91083	<i>Leucopis ninae</i>	Uzbekistan	E	Niles	150	Moore	Etter
08/19/92	T91083	<i>Leucopis ninae</i>	Uzbekistan	A	Niles	365	Moore	Etter
08/19/92	T91085	<i>Leucopis ninae</i>	China	A	Niles	245	Moore	Etter
08/19/92	T91095	<i>Leucopis ninae</i>	China	A	Niles	2,060	Moore	Etter
08/19/92	T91056	<i>Leucopis ninae</i>	Pakistan	A	TAMU	100	Moore	Etter
08/26/92	T91056	<i>Leucopis ninae</i>	Pakistan	A	Niles	1,309	Moore	Etter
08/26/92	T91066	<i>Leucopis ninae</i>	Iran	A	Niles	1,261	Moore	Etter
08/26/92	T91083	<i>Leucopis ninae</i>	Uzbekistan	A	Niles	470	Moore	Etter
08/26/92	T91083	<i>Leucopis ninae</i>	Uzbekistan	E	Niles	325	Moore	Etter
08/26/92	T91085	<i>Leucopis ninae</i>	China	A	Niles	244	Moore	Etter
08/26/92	T91095	<i>Leucopis ninae</i>	China	A	Niles	1,997	Moore	Etter
09/02/92	T91056	<i>Leucopis ninae</i>	Pakistan	A	Niles	1,432	Moore	Etter
09/02/92	T91066	<i>Leucopis ninae</i>	Iran	A	Niles	863	Moore	Etter
09/02/92	T91083	<i>Leucopis ninae</i>	Uzbekistan	A	Niles	317	Moore	Etter

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
09/02/92	T91083	<i>Leucopis ninae</i>	Uzbekistan	E	Niles	2,690	Moore	Etter
09/02/92	T91085	<i>Leucopis ninae</i>	China	A	Niles	225	Moore	Etter
09/02/92	T91095	<i>Leucopis ninae</i>	China	A	Niles	2,253	Moore	Etter
09/18/92	T91056	<i>Leucopis ninae</i>	Pakistan	E	Niles	835	Moore	Etter
09/18/92	T91056	<i>Leucopis ninae</i>	Pakistan	A	Niles	1,542	Moore	Etter
09/18/92	T91066	<i>Leucopis ninae</i>	Iran	E	Niles	155	Moore	Etter
09/18/92	T91066	<i>Leucopis ninae</i>	Iran	A	Niles	2,721	Moore	Etter
09/18/92	T91083	<i>Leucopis ninae</i>	Uzbekistan	E	Niles	1,255	Moore	Etter
09/18/92	T91085	<i>Leucopis ninae</i>	China	A	Niles	6	Moore	Etter
09/18/92	T91095	<i>Leucopis ninae</i>	China	E	Niles	715	Moore	Etter
09/18/92	T91095	<i>Leucopis ninae</i>	China	A	Niles	3,218	Moore	Etter
10/14/92	T91056	<i>Leucopis ninae</i>	Pakistan	A	Niles	17	Moore	Etter
10/14/92	T92020	<i>Leucopis ninae</i>	China	A	Niles	110	Moore	Etter
10/21/92	T92010	<i>Leucopis ninae</i>	Syria	A	TAMU	26	Moore	Etter
10/21/92	T92020	<i>Leucopis ninae</i>	China	A	TAMU	60	Moore	Etter
10/21/92	T92020	<i>Leucopis ninae</i>	China	A	TAMU	50	Moore	Etter
06/02/93	T92010	<i>Leucopis ninae</i>	China	A	TAMU	8	Randall	Bushland
06/02/93	T92020	<i>Leucopis ninae</i>	China	A	TAMU	16	Randall	Bushland
08/17/93	*	<i>Leucopis ninae</i>	China	A	Niles	250	Randall	Bushland
08/17/93	*	<i>Leucopis ninae</i>	Morocco	A	Niles	2,500	Randall	Bushland
08/17/93	*	<i>Leucopis ninae</i>	Uzbekistan	A	Niles	250	Randall	Bushland
08/17/93	T91056	<i>Leucopis ninae</i>	Pakistan	A	Niles	250	Randall	Bushland
08/17/93	T91095	<i>Leucopis ninae</i>	China	A	Niles	250	Randall	Bushland
08/24/93	EPL92-62	<i>Leucopis ninae</i>	China	A	Niles	500	Randall	Bushland
08/24/93	EPL92-65	<i>Leucopis ninae</i>	Morocco	A	Niles	1,000	Randall	Bushland
08/24/93	T91056	<i>Leucopis ninae</i>	Pakistan	A	Niles	154	Randall	Bushland
08/24/93	T91066	<i>Leucopis ninae</i>	Iran	A	Niles	470	Randall	Bushland
08/24/93	T91083	<i>Leucopis ninae</i>	Uzbekistan	A	Niles	321	Randall	Bushland
08/24/93	T91095	<i>Leucopis ninae</i>	China	A	Niles	1,073	Randall	Bushland
08/24/93	T92020	<i>Leucopis ninae</i>	China	A	Niles	500	Randall	Bushland
08/31/93	EPL92-62	<i>Leucopis ninae</i>	China	A	Niles	1,040	Randall	Bushland
08/31/93	T91056	<i>Leucopis ninae</i>	Pakistan	A	Niles	250	Randall	Bushland
08/31/93	T91066	<i>Leucopis ninae</i>	Iran	A	Niles	250	Randall	Bushland

Table 1. Releases of exotic parasites and predators of the Russian wheat aphid in the Texas Panhandle, 1987 to 1993.

Release date	I.D. number	Species	Origin	Stage	Shipping laboratory	Number released	County	Site
08/31/93	T91095	<i>Leucopis ninae</i>	China	A	Niles	1,020	Randall	Bushland
Total		<i>Leucopis ninae</i>				67,634		
12/12/90	T90014	<i>Sphaerophoria rueppellii</i>	Morocco	A	TAMU	20	Randall	Bushland
Total		<i>Sphaerophoria rueppellii</i>				20		
08/17/93	*	<i>Sphaerophoria scripta</i>	France	A	Niles	160	Randall	Bushland
08/17/93	*	<i>Sphaerophoria scripta</i>	France	E	Niles	6,322	Randall	Bushland
08/17/93	*	<i>Sphaerophoria scripta</i>	Greece	E	Niles	3,255	Randall	Bushland
08/24/93	EPL92-44	<i>Sphaerophoria scripta</i>	France	A	Niles	142	Randall	Bushland
08/31/93	EPL92-44	<i>Sphaerophoria scripta</i>	France	A	Niles	100	Randall	Bushland
Total		<i>Sphaerophoria scripta</i>				9,979		
Total predaceous Diptera						142,468		
Overall total						747,912		

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Copies printed: 1,500